```
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LOGINID:ssspat01plr

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 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HOME' AT 10:42:12 ON 06 OCT 2004
FILE 'HOME' ENTERED AT 10:42:12 ON 06 OCT 2004

=> b hcaplus
FILE 'HCAPLUS' ENTERED AT 10:42:16 ON 06 OCT 2004
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FILE COVERS 1907 - 6 Oct 2004  VOL 141 ISS 15
FILE LAST UPDATED: 5 Oct 2004  (20041005/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d que l63
L54         2405 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MICROMETHOD/OBI
L60         2258 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MICROCHANNEL?/OBI
L61         4663 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L54 OR L60
L62          747 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L61 AND (?NUMER? OR ?COUNT?
                 OR ?IDENTIF?)/BI
L63           16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?ORGANISM? OR BACTER? OR
                 FUNG? OR YEAST?)/BI AND L62


=> b biosis
FILE 'BIOSIS' ENTERED AT 10:42:25 ON 06 OCT 2004
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FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 29 September 2004 (20040929/ED)
```

FILE RELOADED: 19 October 2003.

```
=> d que l85
L79         1673 SEA FILE=BIOSIS ABB=ON  PLU=ON  MICROMETHOD? OR MICROCHANNEL?
L80      1160799 SEA FILE=BIOSIS ABB=ON  PLU=ON  BACTERIA+NT/ORGN
L81       505206 SEA FILE=BIOSIS ABB=ON  PLU=ON  FUNGI+NT/ORGN
L82        17417 SEA FILE=BIOSIS ABB=ON  PLU=ON  YEAST/ORGN OR YEASTS/ORGN
L83          273 SEA FILE=BIOSIS ABB=ON  PLU=ON  ((L80 OR L81 OR L82)) AND L79
L84           37 SEA FILE=BIOSIS ABB=ON  PLU=ON  (PLATE? OR DEVICE?)/BI AND L83

L85            4 SEA FILE=BIOSIS ABB=ON  PLU=ON  ?COLON?/BI AND L84


=> b medl
FILE 'MEDLINE' ENTERED AT 10:42:32 ON 06 OCT 2004

 FILE LAST UPDATED: 5 OCT 2004 (20041005/UP). FILE COVERS 1951 TO DATE.

 On February 29, 2004, the 2004 MeSH terms were loaded. See HELP RLOAD
 for details. OLDMEDLINE now back to 1951.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2004 vocabulary. See http://www.nlm.nih.gov/mesh/ and
 http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html for a
 description of changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l78
L64        58617 SEA FILE=MEDLINE ABB=ON  PLU=ON  BACTERIA/CT
L65         2058 SEA FILE=MEDLINE ABB=ON  PLU=ON  "BACTERIA, AEROBIC"/CT
L66         5353 SEA FILE=MEDLINE ABB=ON  PLU=ON  "BACTERIA, ANAEROBIC"/CT
L67        64700 SEA FILE=MEDLINE ABB=ON  PLU=ON  (L64 OR L65 OR L66)
L69       177856 SEA FILE=MEDLINE ABB=ON  PLU=ON  FUNGI+NT/CT
L70        96958 SEA FILE=MEDLINE ABB=ON  PLU=ON  YEASTS+NT/CT
L73       234872 SEA FILE=MEDLINE ABB=ON  PLU=ON  L67 OR (L69 OR L70)
L74        21614 SEA FILE=MEDLINE ABB=ON  PLU=ON  "BACTERIOLOGICAL TECHNIQUES"/C
                 T
L75         4351 SEA FILE=MEDLINE ABB=ON  PLU=ON  L74 AND L73
L76           18 SEA FILE=MEDLINE ABB=ON  PLU=ON  (MICROMETHOD? OR MICROCHANNEL?
                 ) AND L75
L77        49789 SEA FILE=MEDLINE ABB=ON  PLU=ON  "MICROBIAL SENSITIVITY
                 TESTS"+NT/CT
L78           16 SEA FILE=MEDLINE ABB=ON  PLU=ON  L76 NOT L77


=> b wpix
FILE 'WPIX' ENTERED AT 10:42:39 ON 06 OCT 2004
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FILE LAST UPDATED:          1 OCT 2004      <20041001/UP>
MOST RECENT DERWENT UPDATE:     200463        <200463/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

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    http://thomsonderwent.com/coverage/latestupdates/          <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
    http://thomsonderwent.com/support/userguides/              <<<

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>>> NEW DISPLAY FORMAT HITSTR ADDED ALLOWING DISPLAY OF
    HIT STRUCTURES WITHIN THE BIBLIOGRAPHIC DOCUMENT  <<<

=> d que l95
L92        1945 SEA FILE=WPIX ABB=ON  PLU=ON  (MICROMETHOD? OR MICRO(W)METHOD?
                OR MICROCHANNEL? OR MICRO(W)CHANNEL?)/BIX
L93          60 SEA FILE=WPIX ABB=ON  PLU=ON  (BACTER? OR ?FUNG? OR YEAST? OR
                ?ORGANISM?)/BIX AND L92
L94          31 SEA FILE=WPIX ABB=ON  PLU=ON  ?DEVICE?/BIX AND L93
L95          10 SEA FILE=WPIX ABB=ON  PLU=ON  (?COUNT? OR ?NUMER? OR ?NUMBER?)/
                BIX AND L94


=> dup rem l85 l78 l63 l95
FILE 'BIOSIS' ENTERED AT 10:43:04 ON 06 OCT 2004
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FILE 'MEDLINE' ENTERED AT 10:43:04 ON 06 OCT 2004

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FILE 'WPIX' ENTERED AT 10:43:04 ON 06 OCT 2004
COPYRIGHT (C) 2004 THE THOMSON CORPORATION
PROCESSING COMPLETED FOR L85
PROCESSING COMPLETED FOR L78
PROCESSING COMPLETED FOR L63
PROCESSING COMPLETED FOR L95
L97          43 DUP REM L85 L78 L63 L95 (3 DUPLICATES REMOVED)

=> d ibib abs hitind l97 1-43

L97  ANSWER 1 OF 43  WPIX  COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER:      2004-071978 [07]   WPIX
DOC. NO. CPI:          C2004-029733
TITLE:                 Changing binding strength of isolated force-activated
                       bond stress dependent adhesion molecule to its ligand,
                       useful as viscosity modifiers, by changing bond stress on
                       the molecule.
DERWENT CLASS:         B04 D16
INVENTOR(S):           FORERO, M; SOKURENKO, E; THOMAS, W; VOGEL, V
PATENT ASSIGNEE(S):    (FORE-I) FORERO M; (SOKU-I) SOKURENKO E; (THOM-I) THOMAS
                       W; (VOGE-I) VOGEL V; (UNIW) UNIV WASHINGTON
COUNTRY COUNT:         102
PATENT INFORMATION:

     PATENT NO       KIND DATE     WEEK      LA   PG
```

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     ------------------------------------------------
     WO 2004003160   A2 20040108 (200407)* EN  127
        RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS
            LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
            RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM
            ZW
     US 2004067544   A1 20040408 (200426)
     AU 2003256329   A1 20040119 (200447)

APPLICATION DETAILS:

     PATENT NO      KIND                  APPLICATION         DATE
     ------------------------------------------------------------------
     WO 2004003160   A2                   WO 2003-US20434     20030627
     US 2004067544   A1 Provisional       US 2002-392467P     20020627
                                          US 2003-607834      20030627
     AU 2003256329   A1                   AU 2003-256329      20030627

FILING DETAILS:

     PATENT NO       KIND                   PATENT NO
     ------------------------------------------------
     AU 2003256329   A1 Based on            WO 2004003160

PRIORITY APPLN. INFO: US 2002-392467P      20020627; US
                      2003-607834       20030627
AN   2004-071978 [07]   WPIX
AB   WO2004003160 A UPAB: 20040128
     NOVELTY - Changing (M1) binding strength of an isolated force-activated
     bond stress-dependent adhesion molecule (I- FABSDAM) to force-activated
     bond stress-dependent binding ligand (FABSDB-L) for I-FABSDAM, comprising
     changing bond stress on I-FABSDAM, where binding strength increases when
     bond stress increases and decreases when bond stress decreases, is new.
          DETAILED DESCRIPTION - INDEPENDENT CLAIM are also included for:
          (1) removing (M2) a target particle from a fluid, comprising:
          (a) adding to the fluid a target particle binding agent which is
     attached to a first member of a FABSDAM/FABSDB-L pair;
          (b) adding to the fluid the second member of a FABSDAM/FABSDB-L pair
     attached to a removing agent;
          (c) allowing the target particle binding agent to bind the target
     particle;
          (d) applying a bond stress to the FABSDAM to allow force-activated
     bond stress-dependent binding of the first pair member and the second pair
     member; and
          (e) removing the complex from the fluid;
          (2) separating (M3) first FABSDB-Ls from second FABSDB-Ls, where the
     FABSDB-Ls are in a fluid, where the FABSDB-L are capable of binding to
     FABSDAMs in a force-activated bond stress-dependent manner, and where the
     first and second FABSDB-Ls induce different bond stresses on the FABSDAM
     under the same conditions, comprising:
          (a) contacting the fluid with an amount of the FABSDAMs sufficient to
     bind substantially of the first FABSDB-Ls, where the FABSDAMs are attached
     to a removing agent;
          (b) applying a bond stress to the FABSDAMs to cause binding of the
     first FABSDB-Ls to the FABSDAMs to form a complex, the bond stress being
     insufficient to cause binding of the second FABSDB-Ls to the FABSDAMs; and
          (c) removing the complex comprising the first FABSDB-Ls and FABSDAMs
```

and the removing agent;

(3) a fluid **device** (I) comprising a surface having several I-FABSDAMs attached to it;

(4) selectively releasing (M4) into a fluid first FABSDB-Ls from several I-FABSDAMs to which first and second FABSDB-Ls are stress-dependently bound, and where the FABSDB-Ls are bound to the FABSDAMs under bond stress, the first and second FABSDB-Ls induce different bond stresses on the FABSDAMs under the same fluid flow conditions, comprising:

(a) contacting the fluid with the FABSDAMs bound to the SDDB-Ls; and

(b) changing the bond stress on the FABSDAMs to release the first FABSDB-Ls, but not the second, into the fluid;

(5) selectively concentrating (M5) first FABSDB-Ls from second FABSDB-Ls, where the FABSDB-Ls are in a fluid, where the FABSDB-Ls are capable of binding to FABSDAMs in a force-activated bond stress-dependent manner, and where the first and second FABSDB-L induce different bond stresses on the FABSDAM under the same conditions, comprising:

(a) contacting the fluid with the FABSDAMs to bind substantially all of the first FABSDB-Ls, where the FABSDAMs are attached to a removing agent;

(b) applying a bond stress to the FABSDAMs to cause binding of the first FABSDB-Ls to the FABSDAMs to form a complex; and

(c) removing the complex comprising the first FABSDB-Ls and FABSDAMs and the removing agent from the fluid;

(6) measuring (M6) the rate of flow of a fluid, comprising:

(a) adding several FABSDAMs or FABSDB-Ls to the fluid;

(b) placing several FABSDAMs capable of binding to the FABSDB-Ls or several FABSDB-Ls capable of binding to the FABSDAMs in contact with the fluid;

(c) allowing the FABSDAMs and the FABSDB-Ls to bind a force-activated bond stress-dependent manner; and

(d) detecting and quantitatively measuring the amount of binding of the FABSDAMs to the FABSDB-Ls;

(7) delivering (M7) a particle to a surface of a system, the surface having attached to it one member of an I-FABSDAM/FABSDB-L pair, the system also comprising a fluid in contact with the surface, comprising adding to the fluid the other member of the pair attached to the particle and allowing the pair members to bind in a force-activated bond stress-dependent manner;

(8) a bond stress-activated valve (II) for controlling a fluid flow rate in a channel, the channel having a surface in contact with the fluid, the channel surface having attached to it several first member of an I-FABSDAM/FABSDB-L pair, the fluid comprising several second member of the pair, where the first and second members clog or partially clog the channel when bound in complexes in a force-activated bond stress-dependent manner;

(9) a bond stress-activated adhesive system (AS) comprising several I-FABSDAMs and several FABSDB-Ls capable of binding to the I-FABSDAMs in a bond stress dependent manner;

(10) making (M8) (AS), comprising attaching a first member of an I-FABSDAM/FABSDB-L pair to a surface of a first film and attaching the second member of the pair to a surface of a second film;

(11) a viscosity modifier (III) comprising several I-FABSDAMs and a several FABSDB-Ls, the I-FABSDAMs and FABSDB-Ls being capable of binding to each other in force-activated bond stress-dependent manner;

(12) modifying (M9) the viscosity of the fluid, comprising adding to the fluid several I-FABSDAMs, adding to the fluid several FABSDB-Ls capable of binding in a shear stress-dependent manner to the I-FABSDAMs, and changing a bond stress on the I-FABSDAMs;

(13) an antibody (IV) generated using, and capable of binding to a

polypeptide having FimH amino acids 25-31 (S1), FimH amino acids 110-123 (S2), or FimH amino acids 150-160 (S3);

(14) an antibody (V) capable of binding to the force-activated structure of a FABSDAM polypeptide;

(15) an immunogenic composition (VI) comprising a polypeptide having amino acid sequence chosen from (S1), (S2) and (S3);

(16) making (M11) an engineered FimH polypeptide having different force-activated bond stress-dependent binding strength to a selected FABSDB-L than a natural FimH polypeptide, comprising engineering DNA encoding a FimH polypeptide and expressing the engineered FimH polypeptide, which comprises a substitution at positions 154-156, position 32, or position 124; and

(17) (S1)-(S12).

Ala-Pro-Ala-Val-Asn-Val-Gly (S1), Thr-Pro-Val-Ser-Ser-Ala-Gly-Gly-Val-Ala-Ile-Lys-Ala-Gly (S2), Ala-Asn-Asn-Asp-Val-Val-Val-Pro-Thr-Gly-Gly (S3), Ala-Pro-Ala-Val-Asn-Val-Gly-Gln (S4), Thr-Pro-Val-Ser-Ser-Ala-Gly-Gly-Val-Ala-Ile-Lys-Ala-Gly-Ser (S5), Ala-Pro-Ala-Val-Asn-Val-Gly-Leu (S6), Thr-Pro-Val-Ser-Ser-Ala-Gly-Gly-Val-Ala-Ile-Lys-Ala-Gly-Ala (S7), Ala-Asn-Asn-Asp-Pro-Val-Val-Pro-Thr-Gly-Gly (S8), Ala-Asn-Asn-Asp-Val-Pro-Val-Pro-Thr-Gly-Gly (S9), Ala-Asn-Asn-Asp-Val-Val-Pro-Pro-Thr-Gly-Gly (S10), Ala-Asn-Asn-Asp-Pro-Pro-Val-Pro-Thr-Gly-Gly (S11) and Ala-Asn-Asn-Asp-Val-Pro-Pro-Pro-Thr-Gly-Gly (S12).

USE - (M1) is useful for changing (M1) binding strength of an isolated force-activated bond stress-dependent adhesion molecule (I-FABSDAM) to force-activated bond stress-dependent binding ligand (FABSDB-L) for I-FABSDAM (claimed).

DESCRIPTION OF DRAWING(S) - The drawing shows aggregating and dispersing particles functionalized with adhesin and ligands.

Dwg.16/21

L97 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2003:892356 HCAPLUS
DOCUMENT NUMBER: 139:335072
TITLE: **Micromethod** and device for rapid detection, **enumeration** and **identification** of entities
INVENTOR(S): Gazenko, Sergey
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003211566	A1	20031113	US 2002-141677	20020509

PRIORITY APPLN. INFO.: US 2002-141677 20020509

AB This invention describes a method and device for rapid detection, **enumeration** and **identification** of **microorganisms** in liquid or air samples without preliminary growth. It based on the production and accumulation of absorbent or fluorescent mols. during reactions between artificial substrates and enzymes in the super small channels of the sampling-detecting unit, which is a part of sample treating device. The enzymes of cells or enzymes attached to the cell body through antibody-enzyme conjugate produce easily detectable concentration of colored or fluorescent mols. in small volume much faster than in a large volume Channels contain cells look like colored or fluorescent dots under light or

fluorescent microscope.
IC ICM C12Q001-04
NCL 435034000
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 10, 14
ST **micromethod** device detection **enumeration** entity
IT Brucella melitensis
Drinking waters
Escherichia coli
High throughput screening
Microorganism
Milk
Sample preparation
Sampling
(**micromethod** and device for rapid detection, **enumeration** and **identification** of entities)

L97 ANSWER 3 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-221678 [21] WPIX
DOC. NO. NON-CPI: N2003-176818
DOC. NO. CPI: C2003-056445
TITLE: Sorting components of a mixture, e.g. a cell suspension, comprises hydrodynamically flowing a sample in a **microchannel** of a microfluidic **device** and directing a desired component into a receptacle external to the **device.**
DERWENT CLASS: B04 C07 D16 S03 T01
INVENTOR(S): BOUSSE, L J; CHOW, A W; WADA, H G
PATENT ASSIGNEE(S): (CALI-N) CALIPER LIFE SCI INC; (CALI-N) CALIPER TECHNOLOGIES CORP
COUNTRY COUNT: 98
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003006133	A2	20030123	(200321)*	EN	30
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2003027225	A1	20030206	(200321)		
EP 1409989	A2	20040421	(200427)	EN	
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
AU 2002320507	A1	20030129	(200452)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003006133	A2	WO 2002-US22318	20020712
US 2003027225	A1 Provisional	US 2001-305196P	20010713
		US 2002-194978	20020712
EP 1409989	A2	EP 2002-750027	20020712
		WO 2002-US22318	20020712
AU 2002320507	A1	AU 2002-320507	20020712

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1409989	A2 Based on	WO 2003006133
AU 2002320507	A1 Based on	WO 2003006133

PRIORITY APPLN. INFO: US 2001-305196P 20010713; US 2002-194978 20020712

AN 2003-221678 [21] WPIX

AB WO2003006133 A UPAB: 20030328

NOVELTY - Sorting components of a sample mixture, by:

(a) flowing a sample into a **microchannel** in a microfluidic **device** (MD) (100);

(b) flowing a reactant to mix with the sample;

(c) detecting interaction between sample and reactant;

(d) isolating components of sample that exhibit a desired activity based on information received at the detector; and

(e) delivering the components into a receptacle located external to MD.

DETAILED DESCRIPTION - Sorting components of a sample mixture having a desired activity or property, comprises:

(a) providing a MD having a microscale channel network, which is in fluid communication with several reservoirs;

(b) flowing a sample mixture into a **microchannel** within the microscale channel network;

(c) flowing a reactant to mix with the sample within the **microchannel**;

(d) detecting interaction between the sample mixture and the reactant;

(e) isolating components of the sample mixture that exhibit desired activity based on information received at the detector; and

(f) delivering the components into a receptacle located external to MD.

USE - The method is useful for sorting components of a sample mixture comprising a cellular suspension of one or more of mammalian, insect, **bacterial**, **fungal**, **yeast** and plant cells having a desired activity such as the level of calcium flux across the membrane of one or more cells in the cellular suspension, or for a desired property comprising a physical property such as size. The cellular suspension comprises blood cells, including B cells, T cells, monocytes and neutrophils (claimed). The sample mixtures include chemical and biochemical mixtures including chemical compositions, agonists and antagonists of cell membrane receptors, cytokine receptors, chemokine receptors, interleukin receptors, immunoglobulin receptors and antibodies, cadherin family, integrin family, selectin family, toxins and venoms, viral epitopes, hormones, intracellular receptors, enzymes, enzyme substrates, cofactors, drugs, lectins, sugars, nucleic acids, oligosaccharides, proteins, phospholipids and antibodies.

ADVANTAGE - The method is fast and efficient in separating and collecting components of sample mixtures. The **device** utilized for the method minimizes space requirements as well as lowers cost and labor requirements.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic illustration of a microfluidic **device** including a capillary element.

Microfluidic **device** 100

Main channel 104

Wells 106, 108, 110, 114, 116

Side channels 120, 122, 124, 126, 128

Capillary element 118

Dwg.1/6

L97 ANSWER 4 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-787061 [74] WPIX
DOC. NO. CPI: C2003-217066
TITLE: Electromanipulation of cell or cell-like structure comprises transporting cell or structure from sample containers through **microchannel** into chamber comprising electrode, and applying electric field to obtain pore-formation or fusion.
DERWENT CLASS: B04 D16
INVENTOR(S): CHIU, D; KARLSSON, A; KARLSSON, M; ORWAR, O; STROMBERG, A
PATENT ASSIGNEE(S): (CHIU-I) CHIU D; (KARL-I) KARLSSON A; (KARL-I) KARLSSON M; (ORWA-I) ORWAR O; (STRO-I) STROMBERG A
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003104588	A1	20030605	(200374)*		22

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003104588	A1	US 2001-996559	20011130

PRIORITY APPLN. INFO: US 2001-996559 20011130
AN 2003-787061 [74] WPIX
AB US2003104588 A UPAB: 20031117
NOVELTY - Electromanipulation (M1) of a cell or cell-like structure (I) comprising cell-like membranes, comprises transporting cell or (I) from sample containers (SC) through **microchannel** (MC) into chamber having electrode (E) connected to voltage generator, and MC provides fluid contact between SC, cell or (I) and (E) is aligned close to each other in chamber, electric field is applied to obtain pore-formation or fusion.

DETAILED DESCRIPTION - Electromanipulation (M1) of at least one cell or cell-like structure (I) having cell-like membranes involves transporting one cell or (I) from one or more sample containers (1) located on a chip through at least one **microchannel** (3) located on the chip into a chamber located on the chip, where the chamber contains at least one electrode connected to a voltage generator, and where the **microchannel** provides a fluid contact between the sample containers, either at least one cell or (I) is placed or aligned close to at least one electrode, or at least one electrode is placed or aligned close to at least one cell or (I) in the chamber, an electric field is applied and focused on the at least one cell or (I), the electrical field being of strength sufficient to obtain pore-formation in at least one cell or (I) or sufficient to obtain fusion of at least one cell or (I) with another cell or (I) present in the chamber.

INDEPENDENT CLAIMS are also included for the following:

(1) an apparatus (II) for electromanipulation of at least one cell or (I) having cell-like membranes, comprising one or more sample containers for the cell or (I) in fluid contact through at least one **microchannel** with a fusion chamber, optical trapping unit for transport of individual cells or (I) through at least one **microchannel** into the fusion chamber, and at least one microelectrode (4) connected to a voltage generator for providing a focused electrical field in the fusion chamber, where the sample container, the **microchannel** and the fusion chamber are placed on

a chip; and
(2) a biosensor prepared by (M1) or comprising (II).
USE - (M1) is useful for electromanipulation of at least one cell or cell-like structure having cell-like membranes..(M1) or (II) is useful in in vitro fertilization, for cloning, for cell transfection, for producing monoclonal antibodies, for preparing hybridoma, for manipulating a composition of cellular membrane, for delivering a well-defined volume of a substance to a cell, for delivering a pharmaceutically active substance to a cell, or for conducting stem cell research (claimed).
ADVANTAGE - (M1) provides cell-selection, fusion of adherent cell structures with a high spatial resolution and creates complex cellular networks.
DESCRIPTION OF DRAWING(S) - The figure shows schematic picture of a microfluidic **device.**
sample containers 1
electroporation chamber 2
microchannel 3
microelectrode 4
micromanipulators 5
Dwg.2/9

L97 ANSWER 5 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-492162 [46] WPIX
CROSS REFERENCE: 2004-041051 [04]; 2004-059249 [06]
DOC. NO. CPI: C2003-131645
TITLE: Sequencing target nucleic acid by hybridizing the nucleic acid to probe library consisting of 256 distinguishably labeled probes, separating hybridized nucleic acid, detecting order of hybridized probes along nucleic acid.
DERWENT CLASS: B04 D16
INVENTOR(S): HANNAH, E C
PATENT ASSIGNEE(S): (HANN-I) HANNAH E C; (ITLC) INTEL CORP
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003039978	A1	20030227	(200346)*		16
US 6767731	B2	20040727	(200449)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003039978	A1	US 2001-940228	20010827
US 6767731	B2	US 2001-940228	20010827

PRIORITY APPLN. INFO: US 2001-940228 20010827
AN 2003-492162 [46] WPIX
CR 2004-041051 [04]; 2004-059249 [06]
AB US2003039978 A UPAB: 20040802
NOVELTY - Sequencing (M1) a target nucleic acid comprising obtaining a target nucleic acid, hybridizing the target nucleic acid to a probe library consisting of at least 256 different probes each of which is distinguishably labeled, separating the hybridized nucleic acid from unhybridized probes, and detecting the order of hybridized probes along the nucleic acid, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a composition (I) comprising a probe library consisting of at least 256 different probes each of which is distinguishably label; and

(2) a nucleic acid sequencing apparatus which comprises an input chamber (3), a **microchannel** (2) in fluid communication with the input chamber and a detection unit (1) operably coupled to the **microchannel**, which comprises an electron beams source and a detector.

USE - (M1) is useful for sequencing a target nucleic acid, where a single target nucleic acid is sequenced at a time, or two or more target nucleic acid molecules are sequenced at a time (claimed).

The apparatus, composition and method are useful for sequencing large complex genomes. The information obtained form the nucleic acid sequence is useful for determining and initiating **countermeasures**, such as vaccine administration, anti- viral administration, patient monitoring or treatment. The nucleic acid sequence information obtained for a given sample or patient may be compared with a statistically significant reference group of **organisms** or normal patients and patients exhibiting a disease. Therefore, the method has clinical applications.

ADVANTAGE - Intensive manual procedures involving size fractionation of nucleic acid fragments on polyacrylamide gels or avoided. The method provides high speed, small quantity and long read length nucleic acid sequencing. Thus, information about the biological agent or a patient may be obtained in a timely and cost-effective manner.

DESCRIPTION OF DRAWING(S) - The figure shows the microfluidic **device** for sequencing nucleic acids.

Detection unit 1

Microchannel 2

Input chamber 3

Dwg.1/6

L97 ANSWER 6 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-524897 [50] WPIX

DOC. NO. NON-CPI: N2003-416438

DOC. NO. CPI: C2003-141627

TITLE: **Device** for purifying blood, useful for the treatment or prevention of e.g. allergy or autoimmune disease, comprises labeling separated cellular and plasma fractions with specific markers, followed by recombination of the purified components.

DERWENT CLASS: B04 B07 D16 J01 P34

INVENTOR(S): FOSS, P

PATENT ASSIGNEE(S): (FOSS-I) FOSS P

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 10216744	A1	20030618	(200350)*		10

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 10216744	A1	DE 2002-10216744	20020416

PRIORITY APPLN. INFO: DE 2001-10164443 20011229; DE 2001-10160583 20011207

AN 2003-524897 [50] WPIX

AB DE 10216744 A UPAB: 20030805

NOVELTY - **Device** (A) for purifying human or animal blood comprises separation into plasma and cellular components, followed by separation of materials labeled with selected markers.

DETAILED DESCRIPTION - **Device** (A) for purifying human or animal blood comprises:

(1) separation of blood into plasma and cellular components;

(2) treatment of the fractions with markers (M) for particular structural components;

(3) recognition of marked, mobile cellular components by a computer controlled identification system, which are then supplied to a single-cell transport system, so that labeled, identified components can be separated; and

(4) recombination of the purified plasma and cellular components are before leaving the **device** through a common outlet.

USE - The **device** is for the physical removal of cells and compounds from the blood. It can be used for the treatment or prevention of disease (e.g. allergy, rheumatic diseases, autoimmune diseases, coagulation disorders, blood group incompatibility, transplant rejection, cancer (particularly of blood), infections (**bacterial**, viral, **fungal** or by prions), immune deficiency (especially AIDS), poisoning (including by drugs and pharmaceuticals). It may also be used to provide a whole-blood diagnosis, optionally directly associated with therapy.

ADVANTAGE - The **device** provides very specific and rapid treatment of a wide range of diseases, without side effects, particularly without requiring injection of potentially harmful antibodies or antigens.

DESCRIPTION OF DRAWING(S) - Schematic diagram of the **device**

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Blood inlet 5

Plasmapheresis unit 6

Binding column for plasma 9

Magnetic separators 11, 30

Selector for plasma fractions not being treated 12

Device for detecting antibodies in plasma 16

Blood outlet 17

Separator for red cells and thrombocytes 18

Cell marker unit 25

Sorter for labeled cells 26

Sorter for clinically relevant cells 27

Device for monitoring quality of separation and optionally changing separation conditions 29

Dwg.1/1

L97 ANSWER 7 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-627429 [67] WPIX

CROSS REFERENCE: 2003-803920 [75]

DOC. NO. NON-CPI: N2004-028668

DOC. NO. CPI: C2004-012708

TITLE: **Microdevice** useful for isolating, manipulating and detecting moiety e.g. cell or molecule, has substrate and photorecognizable coding pattern on substrate, and does not comprise an anodized metal surface layer.

DERWENT CLASS: B04 D16 J04 L03 S03 U12

INVENTOR(S): CHEN, D; CHENG, J; HUANG, M; LIU, L; ROTHWARF, D M; SUN, B; TAO, G; WANG, X; WU, L; XU, J; YANG, W; DAVID, R; SHAO, W; TAO, G L

PATENT ASSIGNEE(S): (AVIV-N) AVIVA BIOSCIENCES CORP; (UYQI) UNIV QINGHUA; (CHEN-I) CHEN D; (CHEN-I) CHENG J; (HUAN-I) HUANG M; (LIUL-I) LIU L; (ROTH-I) ROTHWARF D M; (SHAO-I) SHAO W; (SUNB-I) SUN B; (TAOG-I) TAO G; (WANG-I) WANG X; (WULL-I)

WU L; (XUJJ-I) XU J; (YANG-I) YANG W; (TAOG-I) TAO G L
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002059603	A2	20020801	(200267)*	EN	104
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW					
US 2002137059	A1	20020926	(200270)		
US 2002187501	A1	20021212	(200301)		
CN 1409110	A	20030409	(200345)		
AU 2002239885	A1	20020806	(200427)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002059603	A2	WO 2002-US850	20020111
US 2002137059	A1 Provisional	US 2001-264458P	20010126
		US 2001-924428	20010807
US 2002187501	A1 Provisional	US 2001-264458P	20010126
	CIP of	US 2001-924428	20010807
		US 2002-104571	20020321
CN 1409110	A	CN 2002-105337	20020225
AU 2002239885	A1	AU 2002-239885	20020111

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002239885	A1 Based on	WO 2002059603

PRIORITY APPLN. INFO: US 2001-924428 20010807; US 2001-264458P 20010126; CN 2001-104318 20010228
AN 2002-627429 [67] WPIX
CR 2003-803920 [75]
AB WO 200259603 A UPAB: 20040429
NOVELTY - A **microdevice** (I) comprising a substrate and a photorecognizable coding pattern on the substrate, and not comprising an anodized metal surface layer, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a kit for manipulating a moiety, comprising (I), and a chip on which a moiety-**microdevice** complex can be manipulated;

(2) an array (II) for detecting moieties, comprising (I) placed or immobilized on a surface;

(3) a library (III) that is synthesized using (I);

(4) a two-dimensional optical encoder (IV) comprising a substrate, and a microfabricated or micromachined two-dimensional optical code on the substrate;

(5) a carrier (V) for chemical synthesis, comprising a surface suitable for chemical synthesis, which comprises a microfabricated or micromachined two-dimensional optical code which identifies a chemical reaction to be conducted on the surface and/or product of the chemical

reaction;

(6) a carrier (VI) for labeling substance, comprising a surface for binding/linking a substance, and a microfabricated or micromachined two-dimensional optical code on surface which is used for identifying substance linked or coupled to carrier; and

(7) a chip (VII) comprising several microfabricated two-dimensional optical encoders, each having biological and chemical substances linked to it, which are identified by the optical code on each optical encoder.

USE - (I) is useful for isolating a moiety such as cell, cellular organelle, virus, molecule or aggregate or its complex, that involves providing (I), contacting a fluid sample containing or suspected of containing the moiety with (I) under conditions allowing binding between the moiety and binding partner, and recovering (I) from the sample, where the identity of the isolated moiety is assessed by photoanalysis of the photorecognizable coding pattern. (I) is also useful for manipulating a moiety, which is effected through a combination of a structure that is external to the chip and a structure that is built-in in the chip. Neither the moiety nor the binding partner is directly manipulatable by a physical force, and the **device** contains an element that makes **microdevice** or moiety-**microdevice** complex manipulatable. The moieties is manipulated sequentially or simultaneously. (I) is also useful for detecting a moiety. (II) is useful for synthesizing a library which involves providing (I), and synthesizing the entities on (I) and sorting (I) after each synthesis cycle according to the photorecognizable coding patterns. The single synthesized entity is peptides, proteins, oligonucleotides, nucleic acids, vitamins, oligosaccharides, carbohydrates, lipids, small molecules, complex or its combination. The synthesized library comprises a defined set of entities that are involved in a biological pathway, belongs to a group of entities with identical or similar biological function, expressed in a stage of cell cycle, cell type, tissue type, organ type or developmental stage, entities whose expression and/or activity are altered in a disease or disorder type or stage, or entities whose expression and/or activity are altered by drug or other treatments. The synthesized library comprises a defined set of nucleic acid fragments comprising 10, 15, 20, 25, 50, 75, 100, 200 or 500 nucleotides, or a defined set of protein or peptide fragments. (III) is useful for generating an antibody library, especially a phage display library. (IV) is useful for conducting chemical synthesis on two-dimensional optical encoder, by mixing (IV), chemically modifying the non-encoding regions of the surface of (IV), continuously passing (IV) through a sorting **device** capable of identifying (IV), and transporting or sorting (IV) into corresponding reaction chambers based on their optical codes, performing synthesis procedures on (IV) in their corresponding reaction chambers, and after each step of the synthesis, mixing the optical encoders and sorting (IV) in a sorting **device** into new, corresponding reaction chambers again based on the optical codes on (IV) and the subsequent requisite synthesis steps for (IV) encoders, and performing a new step of the synthesis, until all requisite synthesis steps are performed. The sorting **device** comprises a **microchannel** that allows the passage of one and only optical encoder at a time, the encoder suspended in a liquid solution is manipulated or controlled to pass through the **microchannel** by an applied force, and the encoder is monitored or detected by a code-reader that is located in the vicinity of **microchannel.** (VII) is useful for measuring and/or detecting a substance, such as DNA, RNA, peptide, protein, antibody, antigen, sugar, lipid, cytokine, hormone, cell, **bacteria**, virus or its composite (all claimed).

(I) is also useful in a high-throughput analysis. (IV) is useful in chemistry, pharmaceutical industry and biotechnology, and for labeling and controlling compound synthesis process, making different kinds of chips

such as DNA, protein and polysaccharide chips, and fabricating a chip.
ADVANTAGE - (V) or (VI) easily determines the identity and quantity of unknown substances and conducts the high throughput screening for reaction products.
DESCRIPTION OF DRAWING(S) - The figure shows **microdevices** which are rectangular in shape and the holes are introduced along the middle lines of the **device.**
Dwg.1/17

L97 ANSWER 8 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2002-241421 [29] WPIX
DOC. NO. CPI: C2002-072581
TITLE: Adhering a biomolecule to a substrate for patterning a surface with a biomolecules, comprises treating substrate with a surfactant compound and a biomolecule.
DERWENT CLASS: A96 B04 D16
INVENTOR(S): BHATIA, S N; CHEN, C S; JASTROMB, W E; TAN, J; TIEN, J Y
PATENT ASSIGNEE(S): (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE; (BHAT-I) BHATIA S N; (CHEN-I) CHEN C S; (JAST-I) JASTROMB W E; (TANJ-I) TAN J; (TIEN-I) TIEN J Y
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002004113	A2	20020117	(200229)*	EN	71
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
AU 2001083492	A	20020121	(200234)		
US 2002182633	A1	20021205	(200301)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002004113	A2	WO 2001-US41344	20010711
AU 2001083492	A	AU 2001-83492	20010711
US 2002182633	A1 Provisional	US 2000-217464P	20000711
		US 2001-904200	20010711

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001083492	A	Based on	WO 2002004113

PRIORITY APPLN. INFO: US 2000-217464P 20000711; US 2001-904200 20010711
AN 2002-241421 [29] WPIX
AB WO 200204113 A UPAB: 20020508
NOVELTY - Adhering (M1) a biomolecule to a substrate (I) comprises treating (I) with a surfactant compound and a biomolecule, is new.
DETAILED DESCRIPTION - Adhering (M1) a biomolecule to a substrate (I) comprising treating (I) with a surfactant compound and a biomolecule or M1 comprising:
(a) providing a binding agent onto a template having a desired

pattern; contacting the template with the substrate so that the binding agent is transferred to the substrate in a pattern corresponding to the template;

(b) providing a non-adhesive agent to the substrate having the binding agent pattern, where the non-adhesive agent adheres to the substrate area not comprising the binding agent; and

(c) providing biomolecules to the substrate, where the biomolecules adhere to the binding agent but not the non-adhesive agent; or

(d) providing a surfactant onto template;

(e) contacting the template with the substrate so that the surfactant is transferred to the substrate in a pattern corresponding to the template;

(f) providing a binding agent to the substrate having the surfactant pattern, where binding agent adheres to the substrate area not comprising the surfactant;

(g) providing a non-adhesive agent to the surface having the pattern of hydrophobic agents;

(h) providing a binding agent that binds to hydrophilic agent; and

(i) providing biomolecules to the surface, where the biomolecules adhere to the binding agent but not the non-adhesive agent.

An INDEPENDENT CLAIM is also included for a **device** (II) for adhering a biomolecule in a predetermined position comprising a substrate having several cytophilic regions that can adhere a biomolecule on the substrate by cytophobic regions to which the biomolecules do not adhere contiguous with the cytophilic regions, where the cytophobic regions comprise one or more surfactant compounds.

USE - M1 is useful for adhering a biomolecule to a substrate especially for patterning a surface with a biomolecules. The method comprises providing a mask to the surface, where the mask has a desired pattern of open areas and closed areas, providing a non-adhesive agent to the surface, and then a binding agent, and finally providing biomolecules to the surface, where the biomolecules adhere to binding agent but not the non-adhesive agent (claimed). (M1) is useful for:

(1) capturing the desired biological molecule or cell;

(2) controlling and studying the role of the microenvironment around cells, e.g., hapatocytes, in vitro;

(3) cell and tissue engineering;

(4) tailoring biomaterial implants; and

(5) fundamental studies on signaling in cell-cell and cell-matrix interactions.

M1 may be:

(1) used to create patterns of cells in which cells are isolated on islands to prevent cell to cell contact, in which different types of cells are specifically brought into contact or in which cells of one or more types are brought into a pattern which corresponds to the pattern or architecture found in natural tissue;

(2) useful in bioreactors for the production of proteins or antibodies, especially by recombinant cells;

(3) useful in tissue culture;

(4) useful for the creation of artificial tissues for grafting or implantation;

(5) useful artificial organs such as artificial liver **devices** for providing liver function in cases of liver failure;

(6) useful for generating artificial tissues to adhere to the surfaces of prosthetic or implantable **devices** to prevent connective tissue encapsulation;

(7) useful in non-fouling domains of diagnostics, drug delivery, in vitro microarrays.

(M1) is also useful for materials and methods for isolating and manipulating particular individual cells which are present on a plate

containing a great multiplicity of cells separated one from another by only a few microns. (II) is used to promote ordered cell-cell contact or to bring cells close to one another, but prevent such contact. (II) are useful in the creation of artificial tissues for research or in vivo purposes and in connection with creating artificial organs such as artificial liver **devices.** (II) is also useful in connection with generating surfaces for prosthetic or implantable **devices.**
Assays using an immobilized array of nucleic acid sequences may be used for determining the sequence of an unknown nucleic acid, single nucleotide polymorphism (SNP) analysis, analysis of gene expression patterns from a particular species, tissue, cell type, etc, gene identification, etc. Patterned plates with a grid pattern, can be used in cytometry for e.g., the **numbers** or ratios of different types of cells in a sample.
ADVANTAGE - Enables the production of a patterned surface that does not require covalent linkage or other specialized materials or equipment and the surfactant compound need not be covalently linked to the substrate for good performance results. (I) is simple, chemically-generic tool for patterning non-adhesive domains, e.g. by using PEO (undefined).
Dwg.0/8

L97 ANSWER 9 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:685133 HCAPLUS
DOCUMENT NUMBER: 136:259413
TITLE: Measurement of oxyradicals from leukocytes lodged in a **microchannel** array
AUTHOR(S): Kikuchi, Yuji; Kikuchi, Hiroko E.
CORPORATE SOURCE: Food Engineering Division, National Food Research Institute, Tsukuba, 305-8642, Japan
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2001), 4265(Biomedical Instrumentation based on Micro- and Nanotechnology), 14-19
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The oxyradical production by leukocytes is crucial for killing invading **bacteria**, while it has been widely discussed as a tissue injuring factor. Despite such importance of the event, it is still unclear, probably because of lack of simple and reliable measurement methods, to what extent it varies among different subjects and either to what extent it is affected by environmental factors including diet. The present paper describes use of microfabricated channel arrays, that have been developed for use in studies of blood rheol., in the oxyradical measurement by chemiluminescence. Fresh heparinized whole blood was caused to flow through a microchannel array (width 7 μm, length 30 μm, depth 4.5 μm, and number 8736 in parallel) under a 20 cmH2O suction with the addition of Salmonella typhimurium cells (2 x 107 CFU/mL) or S. typhimurium lipopolysaccharides (LPS; 100 ng/mL) and luminol (200μM). When 100 μl passed, the flow was ceased and leukocytes lodged in the microchannel array were subjected to the photoemission measurement by a photon-**counting** VIM camera system or a photomultiplier-DC amplifier system. The passage depth (4.5 μm) photons emitted in the observation direction are not absorbed by red cells. In addition, the microchannel array concentrated leukocytes there are hence gave a sufficient number of leukocytes in the observable or luminous area, i.e., a sufficient intensity of photoemission that allowed a real time measurement. Thus, a simpler and more reliable method because of unnecessity of cell separation or dilution of whole blood has been established. An unexpectedly large

variation in the oxyradical production by leukocytes was observed among healthy subjects.

CC 9-5 (Biochemical Methods)

ST oxyradical leukocyte **microchannel** array chemiluminescence

IT Leukocyte
Luminescence, chemiluminescence
Salmonella typhimurium
(measurement of oxyradicals from leukocytes lodged in **microchannel** array)

IT Reactive oxygen species
RL: ANT (Analyte); ANST (Analytical study)
(measurement of oxyradicals from leukocytes lodged in **microchannel** array)

IT 7782-44-7D, Oxygen, reactive species
RL: ANT (Analyte); ANST (Analytical study)
(measurement of oxyradicals from leukocytes lodged in **microchannel** array)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L97 ANSWER 10 OF 43 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2002:25169 BIOSIS
DOCUMENT NUMBER: PREV200200025169
TITLE: Nitrification in sequencing biofilm batch reactors: Lessons from molecular approaches.
AUTHOR(S): Daims, H.; Purkhold, U.; Bjerrum, L.; Arnold, E.; Wilderer, P. A.; Wagner, M. [Reprint author]
CORPORATE SOURCE: Lehrstuhl fuer Mikrobiologie, Technische Universitaet Muenchen, Am Hochanger 4, 85350, Freising, Germany
SOURCE: Water Science and Technology, (2001) Vol. 43, No. 3, pp. 9-18. print.
CODEN: WSTED4. ISSN: 0273-1223.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Dec 2001
Last Updated on STN: 25 Feb 2002

AB The nitrifying microbial diversity and population structure of a sequencing biofilm batch reactor receiving sewage with high ammonia and salt concentrations (SBBR 1) was analyzed by the full-cycle rRNA approach. The diversity of ammonia-oxidizers in this reactor was additionally investigated using comparative sequence analysis of a gene fragment of the ammonia monooxygenase (amoA), which represents a key enzyme of all ammonia-oxidizers. Despite the "extreme" conditions in the reactor, a surprisingly high diversity of ammonia-and nitrite-oxidizers was observed to occur within the biofilm. In addition, molecular evidence for the existence of novel ammonia-oxidizers is presented. Quantification of ammonia-and nitrite-oxidizers in the biofilm by Fluorescent In situ Hybridization (FISH) and digital image analysis revealed that ammonia-oxidizers occurred in higher cell numbers and occupied a considerably larger share of the total biovolume than nitrite-oxidizing bacteria. In addition, ammonia oxidation rates per cell were calculated for different WWTPs following the quantification of ammonia-oxidizers by competitive PCR of an amoA gene fragment. The morphology of nitrite-oxidizing, unculturable Nitrospira-like bacteria was studied using FISH, confocal laser scanning microscopy (CLSM) and three-dimensional visualization. Thereby, a complex network of **microchannels** and cavities was detected within **microcolonies** of Nitrospira-like bacteria. Microautoradiography combined with FISH was applied to investigate the ability of these organisms to use CO2 as carbon source and

to take up other organic substrates under varying conditions. Implications of the obtained results for fundamental understanding of the microbial ecology of nitrifiers as well as for future improvement of nutrient removal in wastewater treatment plants (WWTPs) are discussed.

CC Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Enzymes - General and comparative studies: coenzymes 10802
Physiology and biochemistry of bacteria 31000
Public health - Sewage disposal and sanitary measures 37014

IT Major Concepts
Equipment, Apparatus, **Devices** and Instrumentation; Methods and Techniques; Waste Management (Sanitation)

IT Chemicals & Biochemicals
ammonia; enzymes; gene fragments; rRNA [ribosomal RNA]: sequencing; salts

IT Methods & Equipment
bioreactors: applications, equipment; competitive polymerase chain reaction: molecular method; fluorescence in-situ hybridization: analytical method; sequencing biofilm batch reactors: applications, equipment

IT Miscellaneous Descriptors
microbial biofilms; microbial ecology; nitrification; sewage; wastewater treatment plants

ORGN Classifier
Bacteria 05000
Super Taxa
Microorganisms
Organism Name
bacteria
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGN Classifier
Microorganisms 01000
Super Taxa
Microorganisms
Organism Name
microorganism
Taxa Notes
Microorganisms

RN 7664-41-7 (ammonia)
7647-14-5 (salts)

L97 ANSWER 11 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-665207 [64] WPIX
DOC. NO. NON-CPI: N2000-492982
DOC. NO. CPI: C2000-201566
TITLE: Microfluidic system for the electrochemical detection of target analytes, e.g. environmental pollutants, cells, hormones, nucleic acids and drugs.
DERWENT CLASS: B04 D16 J04 S03
INVENTOR(S): KAYYEM, J F
PATENT ASSIGNEE(S): (CLIN-N) CLINICAL MICRO SENSORS INC; (CLIN-N) CLINICAL MICRO SENSORS
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000062931	A1	20001026	(200064)*	EN	114

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000043680 A 20001102 (200107)
EP 1183102 A1 20020306 (200224) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI
JP 2002542461 W 20021210 (200301) 173
EP 1183102 B1 20031217 (200404) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
EP 1391241 A1 20040225 (200415) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
DE 60007306 E 20040129 (200416)
AU 771571 B2 20040325 (200454)
ES 2213009 T3 20040816 (200455)

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 2000062931	A1		WO 2000-US10903	20000421
AU 2000043680	A		AU 2000-43680	20000421
EP 1183102	A1		EP 2000-923580	20000421
			WO 2000-US10903	20000421
JP 2002542461	W		JP 2000-612061	20000421
			WO 2000-US10903	20000421
EP 1183102	B1		EP 2000-923580	20000421
			WO 2000-US10903	20000421
		Related to	EP 2003-22729	20000421
EP 1391241	A1	Div ex	EP 2000-923580	20000421
			EP 2003-22729	20000421
DE 60007306	E		DE 2000-00007306	20000421
			EP 2000-923580	20000421
			WO 2000-US10903	20000421
AU 771571	B2		AU 2000-43680	20000421
ES 2213009	T3		EP 2000-923580	20000421

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000043680	A	Based on	WO 2000062931
EP 1183102	A1	Based on	WO 2000062931
JP 2002542461	W	Based on	WO 2000062931
EP 1183102	B1	Based on	WO 2000062931
EP 1391241	A1	Div ex	EP 1183102
DE 60007306	E	Based on	EP 1183102
		Based on	WO 2000062931
AU 771571	B2	Previous Publ.	AU 2000043680
		Based on	WO 2000062931
ES 2213009	T3	Based on	EP 1183102

PRIORITY APPLN. INFO: US 1999-295691 19990421
AN 2000-665207 [64] WPIX
AB WO 200062931 A UPAB: 20001209
NOVELTY - A microfluidic system (I) for the electrochemical detection of target analytes, is new.
DETAILED DESCRIPTION - A microfluidic system (I) for the detection of

a target analyte in a sample comprising a solid support, comprising:
(1) a sample inlet port;
(2) a sample handling well comprising at least 1 well port;
(3) a first **microchannel** to allow fluid contact between the sample inlet port and the sample handling port;
(4) a detection module, comprising:
(a) a detection electrode;
(b) a self assembled monolayer;
(c) a binding ligand; and
(d) a detection port inlet port to receive the sample; and
(5) a second **microchannel** to allow fluid contact between the sample handling well port and the detection inlet port.
An INDEPENDENT CLAIM is also included for a method (II) for the detection of a target analyte in a sample, comprising:
(A) introducing the sample to a sample inlet port of a microfluidic **device** comprising a solid support, comprising:
(I) at least 1 sampling handling well comprising a well inlet port and a well outlet port;
(II) a first **microchannel** to allow fluid contact between thew sample inlet port and the sample handling well;
(III) a detection electrode comprising:
(1) a self assembled monolayer;
(2) a binding ligand; and
(3) a detection port inlet port to receive the sample; and
(IV) a second **microchannel** to allow fluid contact between the sample handling well and the detection inlet port; and
(B) detecting the presence of the target analyte in the sample.
USE - (I) may be used to detect target analytes such as environmental pollutants (e.g. pesticides, toxins and insecticides), chemicals (e.g. solvents, polymers and organic materials), therapeutic molecules (e.g. therapeutic and abused drugs), biomolecules (e.g. hormones, cytotoxins, proteins, lipids, carbohydrates, antigens and receptors or their ligands), whole cells (e.g. pathogenic **bacteria** and tumor cells), viruses (e.g. retroviruses and herpes viruses), and other molecules including nucleic acids, enzymes, antibodies, growth factors and cytokines.
ADVANTAGE - (I) Is small in size improving sensitivity and reducing equipment and reagent costs, and allows electronic detection of the analytes.
DESCRIPTION OF DRAWING(S) - The drawing shows a microfluidic system for the electrochemical detection of target analytes.
Solid support 5
Inlet port 10
Microchannels 15, 20
Storage module 25
Detection module 30
Electrodes 35, 20A
Dwg.1A/1

L97 ANSWER 12 OF 43 WPIX COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-672633 [65] WPIX
DOC. NO. CPI: C2000-203739
TITLE: Nucleic acid amplification, useful e.g. for diagnosis or forensics, uses many short cycles with low degree of amplification per cycle for quicker production of product.
DERWENT CLASS: B04 D16
INVENTOR(S): KOPF-SILL, A R
PATENT ASSIGNEE(S): (CALI-N) CALIPER TECHNOLOGIES CORP; (KOPF-I) KOPF-SILL A R
COUNTRY COUNT: 22

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000060108	A1	20001012	(200065)*	EN	63
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA					
AU 2000041906	A	20001023	(200107)		
US 6303343	B1	20011016	(200164)		
EP 1165824	A1	20020102	(200209)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
US 2002055149	A1	20020509	(200235)		
US 6524830	B2	20030225	(200323)		
AU 771068	B2	20040311	(200454)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000060108	A1	WO 2000-US8800	20000403
AU 2000041906	A	AU 2000-41906	20000403
US 6303343	B1	US 1999-287069	19990406
EP 1165824	A1	EP 2000-921613	20000403
		WO 2000-US8800	20000403
US 2002055149	A1 Div ex	US 1999-287069	19990406
		US 2001-943070	20010829
US 6524830	B2 Div ex	US 1999-287069	19990406
		US 2001-943070	20010829
AU 771068	B2	AU 2000-41906	20000403

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000041906	A Based on	WO 2000060108
EP 1165824	A1 Based on	WO 2000060108
US 2002055149	A1 Div ex	US 6303343
US 6524830	B2 Div ex	US 6303343
AU 771068	B2 Previous Publ.	AU 2000041906
	Based on	WO 2000060108

PRIORITY APPLN. INFO: US 1999-287069 19990406; US 2001-943070 20010829

AN 2000-672633 [65] WPIX

AB WO 200060108 A UPAB: 20001214

NOVELTY - A cyclic polymerase-mediated reaction is performed by incubating polymerase, template and primers for a time (t1), where t1 at most 0.5(t2), t2 is the time required for duplication of at least 90% of template molecules, with the template being the rate-determining component and is repeated for a **number** of cycles (x1) that is greater then the **number** of cycles required to produce a detectable amount of product when the components are reacted for t2.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) method for performing polymerase chain reaction (PCR) with cycle time reduced to below t2 but sufficient to duplicate at least 90% of the templates present and an increased **number** of cycles;

(b) method for amplifying a template comprising denaturation of the template, hybridization to at least one complementary primer and extending the primer, where the total denaturation, hybridization and extending the

hybridized primer with polymerase, extension time is not over 6 seconds, and the cycle is repeated to produce a detectable amount of product;

(c) apparatus for amplifying one or more nucleic acids comprising at least one microscale channel coupled to a thermal control element which cycles the temperature in at least one region of the channel at intervals of not over 4 seconds; and

(d) an integrated amplification system comprising the apparatus of (c) plus a computer and software.

USE - The method is used for polymerase chain reaction (PCR) amplification of target DNA, e.g. for medical diagnosis; forensic studies; in population and phylogenetic studies; for production of probes; isolation of sequences from libraries and detecting presence or absence of particular genes in a cell.

ADVANTAGE - By limiting amplification of target in each cycle, but increasing the **number** of cycles, a detectable amount of product is formed more quickly compared with the use of fewer but longer cycles. Typically, to produce a certain amount of product, 20 cycles, each of 3 minutes and each providing 100% amplification were required. The same amount could be produced in 24.46 cycles each of 6.6 seconds (providing only 4% amplification within a cycle), i.e. total time of only 2.69 minutes compared with 60 minutes.

Dwg.0/2

L97 ANSWER 13 OF 43 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2000:461537 BIOSIS
DOCUMENT NUMBER: PREV200000461537
TITLE: Susceptibility to antibiotics and characteristics of the esculin-positive Pseudomonas aeruginosa biovar.
AUTHOR(S): Sivolodsky, E. P. [Reprint author]
CORPORATE SOURCE: Military Medical Academy, Saint Petersburg, Russia
SOURCE: Antibiotiki i Khimioterapiya, (2000) Vol. 45, No. 8, pp. 17-20. print.
CODEN: ANKHEW. ISSN: 0235-2990.
DOCUMENT TYPE: Article
LANGUAGE: Russian
ENTRY DATE: Entered STN: 25 Oct 2000
Last Updated on STN: 10 Jan 2002

AB Strains of Pseudomonas aeruginosa hydrolyzing esculin were isolated for the first time. They amount to 17.1+-2.0% (60 from 325) of the investigated P.aeruginosa strainns isolated from the clinical material in St. Petersburg. Esculin hydrolysis was measured by **micromethod** in **plates**, results were analysed after 3-hours incubation at 37 degreeC. Esculin-positive strains possesed biovar properties: they are widely spread, demonstrated other characteristic features (absence of triethylamine odour, specific **colonies** lysis), are stable on ability to hydrolyse esculin while culture storage and after repeated culturing. Typical strain of esculinolytica biovar was deposited into the culture collection of the National Research Institute of Agricultural Microbiology as P.aeruginosa ARRIAM 64-A. Susceptibility testing of the esculin-positive strains by disk-diffusion method revealed that most strains were inhibited by imipenem (86.6%), amikacin (75.0%), ceftazidime (65.0%), meropenem (60.0%), aztreonam (51.6%). The percent of strains susceptible to other antibiotics was lower: azlocillin - 33.3%, netilmycin - 33.3%, piperacillin - 26.6%, ceftriaxon - 18.3%. Only small number of strains were inhibited by ciprofloxacin (8.3%), gentamycin (3.4%), cefoperazone (1.7%) and carbenicillin (1.7%). The results may be used for empiric therapy before the isolated strain susceptibility is tested but only according to positive esculin-hydrolysis express-test evaluated in 3-hours period.

CC Biochemistry studies - General 10060
Pathology - Therapy 12512
Pharmacology - General 22002
Physiology and biochemistry of bacteria 31000
Chemotherapy - Antibacterial agents 38504
IT Major Concepts
Pharmacology
IT Chemicals & Biochemicals
amikacin: antibacterial-drug; azlocillin: antibacterial-drug; aztreonam: antibacterial-drug; carbenicillin: antibacterial-drug; cefoperazone: antibacterial-drug; ceftazidime: antibacterial-drug; ceftriaxon: antibacterial-drug; ciprofloxacin: antibacterial-drug; esculin: hydrolysis; gentamycin: antibacterial-drug; imipenem: antibacterial-drug; meropenem: antibacterial-drug; netilmycin: antibacterial-drug; piperacillin: antibacterial-drug
IT Methods & Equipment
disk diffusion method: analytical method
IT Miscellaneous Descriptors
antibiotic susceptibility
ORGN Classifier
Pseudomonadaceae 06508
Super Taxa
Gram-Negative Aerobic Rods and Cocci; Eubacteria; Bacteria; Microorganisms
Organism Name
Pseudomonas aeruginosa: biovar, esculin-positive strains, pathogen
Taxa Notes
Bacteria, Eubacteria, Microorganisms
RN 37517-28-5 (amikacin)
37091-66-0 (azlocillin)
78110-38-0 (aztreonam)
4697-36-3 (carbenicillin)
62893-19-0 (cefoperazone)
72558-82-8 (ceftazidime)
85721-33-1 (ciprofloxacin)
531-75-9 (esculin)
1403-66-3 (gentamycin)
64221-86-9 (imipenem)
96036-03-2 (meropenem)
61477-96-1 (piperacillin)

L97 ANSWER 14 OF 43 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 2
ACCESSION NUMBER: 1995:411264 BIOSIS
DOCUMENT NUMBER: PREV199598425564
TITLE: A **micromethod** for enumeration of **colony** -forming bacteria.
AUTHOR(S): Veslopolova, E. F.
CORPORATE SOURCE: Inst. Microbiol., Russ. Acad. Sci., Moscow, Russia
SOURCE: Mikrobiologiya, (1995) Vol. 64, No. 2, pp. 279-284. CODEN: MIKBA5. ISSN: 0026-3656.
DOCUMENT TYPE: Article
LANGUAGE: Russian
ENTRY DATE: Entered STN: 27 Sep 1995
Last Updated on STN: 27 Sep 1995
AB A method for enumeration of viable bacteria in eutrophic and mesotrophic habitats is suggested that is based on inoculating small spots on the surface of solid media with aliquots from serial dilutions of water samples. The amount of microorganisms capable of growth on the media used is estimated via two independent approaches: (1) direct count of the

number of **colonies** on the area inoculated from a certain dilution and (2) count of growth-yielding inoculated spots with further assessment of the number of bacteria in the sample by the statistical method employing the most-probable-number (MPN) tables. The exact procedure involves application onto the surface of a solid medium (according to a definite pattern) of 3 to 10 separate 1 mu-l drops from each of three to five successive tenfold dilutions of the investigated sample. After a standard incubation period, the number of **colonies** on an area inoculated from a certain dilution and the occurrence of bacterial growth in each inoculation spot are taken into account. The results obtained in the latter case are coded and converted to cells/ml using the MPN tables. The suggested method allows several-fold reduction of the amount of laboratory glassware and nutrient media used, without any decrease in reliability and information content of the results obtained.

CC Methods - Laboratory methods 01004
Methods - Laboratory apparatus 01006
Methods - Field methods 01008
Ecology: environmental biology - Oceanography and limnology 07510
Biochemistry methods - General 10050
Biochemistry studies - General 10060
Nutrition - General studies, nutritional status and methods 13202
Physiology and biochemistry of bacteria 31000
Microbiological apparatus, methods and media 32000
Medical and clinical microbiology - General and methods 36001
Medical and clinical microbiology - Bacteriology 36002

IT Major Concepts
Biochemistry and Molecular Biophysics; Equipment, Apparatus, **Devices** and Instrumentation; Estuarine Ecology (Ecology, Environmental Sciences); Infection; Methods and Techniques; Nutrition; Physiology

IT Miscellaneous Descriptors
DILUTIONS; GLASSWARE; GROWTH; MEDIA; MOST PROBABLE NUMBER; VIABILITY; WATER SAMPLES

ORGN Classifier
Bacteria 05000
Super Taxa
Microorganisms
Organism Name
bacteria
Taxa Notes
Bacteria, Eubacteria, Microorganisms

L97 ANSWER 15 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:567542 HCAPLUS
DOCUMENT NUMBER: 117:167542
TITLE: Plate **micromethod** for assay of sensitivity to antibacterial drugs in anaerobic microbes
AUTHOR(S): Ushakov, R. V.; Tsarev, V. N.
CORPORATE SOURCE: Moscow Med. Stomatol. Inst., Russia
SOURCE: Antibiotiki i Khimioterapiya (1992), 37(5), 10-11
CODEN: ANKHEW; ISSN: 0235-2990
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB A micromethod based on the use of plates with wells and microquantities of microbial suspensions is described. It provides determination of MICs of antibacterial drugs and sensitivity of clin. strains of anaerobes of 2 or 3 species predominating in pathol. materials as well as to preliminarily **identify** some anaerobic **bacteria** by their antibiotic sensitivity.

CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 9
ST anaerobic **bacteria** antibiotic sensitivity assay
IT Antibiotics
(anaerobic **bacteria** sensitivity to, plate **micromethod** for determination of)
IT **Bacteria**
(anaerobic, antibiotic sensitivity of, plate **micromethod** for determination of)
IT 57-92-1, Streptomycin, biological studies 59-01-8, Kanamycin 114-07-8, Erythromycin 1403-66-3, Gentamicin 1404-55-3, Ristomycin 1406-11-7, Polymyxin 3922-90-5, Oleandomycin 13292-46-1, Rifampicin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(anaerobic **bacteria** sensitivity to, plate **micromethod** for determination of)

L97 ANSWER 16 OF 43 MEDLINE on STN
ACCESSION NUMBER: 91178041 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2007629
TITLE: Evaluation of AN-Ident.
AUTHOR: Quentin C; Desailly-Chanson M A; Bebear C
CORPORATE SOURCE: Laboratoire de Bacteriologie, Hopital Pellegrin, Bordeaux, France.
SOURCE: Journal of clinical microbiology, (1991 Feb) 29 (2) 231-5.
Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199105
ENTRY DATE: Entered STN: 19910519
Last Updated on STN: 19910519
Entered Medline: 19910501
AB AN-Ident (Analytab Products, Inc., Plainview, N.Y.) is a ready-to-use system for anaerobe identification. It is based on the detection of constitutive preformed enzymes, is growth independent, and requires only 4 h of aerobic incubation. This **micromethod** was evaluated for its ability to identify anaerobic bacteria by using a conventional methodology as a reference. Of 265 clinical isolates, AN-Ident accurately identified 241 (91%) of the isolates to the species level and 259 (98%) of the isolates to the genus level, with limited supplemental testing needed (5%). The AN-Ident system performed well for the most common pathogens but less satisfactorily for infrequently isolated and/or asaccharolytic species; expansion and updating of the data base would be helpful. Although some color reactions were difficult to interpret, the commercial kit was easy to use.
CT Check Tags: Comparative Study; Human
***Bacteria, Anaerobic: IP, isolation & purification**
*Bacterial Infections: DI, diagnosis
***Bacteriological Techniques**
Bacteroides: IP, isolation & purification
Clostridium: IP, isolation & purification
Evaluation Studies

L97 ANSWER 17 OF 43 MEDLINE on STN
ACCESSION NUMBER: 89083278 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3060822
TITLE: Evaluation of the RapID ANA system as a four-hour method for anaerobe identification.

AUTHOR: Downes J; Andrew J H
CORPORATE SOURCE: Department of Microbiology, St Vincent's Hospital, Melbourne.
SOURCE: Pathology, (1988 Jul) 20 (3) 256-9.
Journal code: 0175411. ISSN: 0031-3025.
PUB. COUNTRY: Australia
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198902
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19890209

AB The RapID ANA system (Innovative Diagnostic Systems Inc., Atlanta, Ga, USA), a 4-hour **micromethod** for identifying clinically important anaerobic bacteria, was evaluated using 196 anaerobic clinical isolates and the results were compared with those obtained by applying conventional Virginia Polytechnic Institute (VPI) methodology. The identifications achieved by the RapID ANA system for 141 (72%) of these isolates agreed with the species identifications obtained using VPI methodology, without the need for additional tests. A further 40 (20%) were in agreement after performance of additional suggested tests, 11 (6%) were misidentified and 4 (2%) could not be identified using the RapID ANA system. Excellent agreement between the two methods was demonstrated for the Gram-positive cocci and good agreement for the Gram-negative bacilli. The RapID ANA system was suboptimal in the identification of Clostridium species other than C. perfringens.

CT Check Tags: Comparative Study; Human
***Bacteria, Anaerobic: CL, classification**
Bacteria, Anaerobic: IP, isolation & purification
***Bacteriological Techniques**
Bacteroides: CL, classification
Bacteroides: IP, isolation & purification
Clostridium: CL, classification
Clostridium: IP, isolation & purification
*Gram-Negative Anaerobic Bacteria: CL, classification
Gram-Negative Anaerobic Bacteria: IP, isolation & purification
*Reagent Kits, Diagnostic
Time Factors

CN 0 (Reagent Kits, Diagnostic)

L97 ANSWER 18 OF 43 MEDLINE on STN
ACCESSION NUMBER: 88278864 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3134775
TITLE: [Use of a **micromethod** for quantitative testing of disinfectants].
Anwendung eines Mikroverfahrens bei quantitativen Desinfektionsmittelprufungen.
AUTHOR: Kleiner U; Trenner P
CORPORATE SOURCE: Institut fur angewandte Tierhygiene Eberswalde beim Ministerium fur Land-, Forst- und Nahrungsguterwirtschaft der DDR.
SOURCE: Zentralblatt fur Bakteriologie, Mikrobiologie und Hygiene. Serie B, Umwelthygiene, Krankenhaushygiene, Arbeitshygiene, praventive Medizin, (1988 Mar) 186 (1) 89-93.
Journal code: 8606774. ISSN: 0932-6073.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals

ENTRY MONTH: 198808
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880818

AB A **micromethod** will be recommended for indirect enumeration of bacteria in quantitative testing of disinfectants. This method works with only 10 percent of volumina used in commonly macromethod. The advantages of microtechnique are reduction of working time and material as like as a rising of trial quantity and a reduction of substance doses needed for testing.

CT Check Tags: Comparative Study
***Bacteria: GD, growth & development**
Bacteriological Techniques
*Disinfectants: ST, standards
English Abstract
Predictive Value of Tests

CN 0 (Disinfectants)

L97 ANSWER 19 OF 43 MEDLINE on STN
ACCESSION NUMBER: 88081459 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3319374
TITLE: Comparison of RapID-ANA and Minitek with a conventional method for biochemical identification of anaerobes.
AUTHOR: Hussain Z; Lannigan R; Schieven B C; Stoakes L; Kelly T; Groves D
CORPORATE SOURCE: Department of Clinical Microbiology, Victoria Hospital Corporation, London, Ontario, Canada.
SOURCE: Diagnostic microbiology and infectious disease, (1987 May) 7 (1) 69-72.
Journal code: 8305899. ISSN: 0732-8893.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198801
ENTRY DATE: Entered STN: 19900305
Last Updated on STN: 19900305
Entered Medline: 19880128

AB Two **micromethods** for the identification of anaerobes, one requiring growth (Minitek) and one nongrowth dependent (RapID-ANA), were compared with a conventional identification culture system. For 222 clinical isolates, RapID-ANA agreed with PRAS in 187 (84%) and Minitek agreed for only 170 strains (76%). Both systems identified common isolates well, but encountered some difficulty in identifying less common clostridia and Gram-negative bacilli. Although adequate for most strains, the results from both systems should be interpreted with caution, particularly for less frequently isolated species.

CT Check Tags: Comparative Study
Bacteria, Anaerobic: CL, classification
Bacteria, Anaerobic: GD, growth & development
***Bacteria, Anaerobic: IP, isolation & purification**
Bacteriological Techniques
Culture Media

CN 0 (Culture Media)

L97 ANSWER 20 OF 43 MEDLINE on STN
ACCESSION NUMBER: 87083845 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3539997
TITLE: Premarket evaluation of IDS RapID SS/u system for identification of urine isolates.

AUTHOR: Halstead D C; Hoffert M R; Colasante G G
SOURCE: Journal of clinical microbiology, (1987 Jan) 25 (1) 42-4.
Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198702
ENTRY DATE: Entered STN: 19900302
Last Updated on STN: 19900302
Entered Medline: 19870219

AB A total of 170 fresh clinical urine isolates were tested with a premarket configuration of the RapID SS/u system (Innovative Diagnostic Systems, Inc., Atlanta, Ga.), a qualitative **micromethod** for the identification of selected organisms commonly isolated from urine specimens. Results were compared with those obtained with conventional methods of identifying gram-positive isolates and with the AutoMicrobic system (Vitek Systems, Inc., Hazelwood, Mo.), utilizing Gram-Negative Identification cards for the identification of gram-negative rods. Organisms representing 12 taxa were included in the study. Of the 170 isolates, 163 (95.9%) were correctly identified. A total of 144 strains (84.7%) were correctly identified without additional testing, whereas 19 isolates (11.2%) required further testing. Seven isolates (4.1%) were incorrectly identified. The SS/u system required minimal hands-on time inoculate and interpret reactions. Discrepancies most often occurred with regard to misinterpretation of Escherichia coli and Enterobacter sp. as Citrobacter sp. The IDS RapID SS/u system may indeed prove valuable for the rapid manual identification of urine isolates.

CT Check Tags: Comparative Study; Human
Bacteriological Techniques
Evaluation Studies
*Gram-Negative Bacteria: IP, isolation & purification
*Gram-Positive Bacteria: IP, isolation & purification
Mycology: MT, methods
*Urine: MI, microbiology
***Yeasts: IP, isolation & purification**

L97 ANSWER 21 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:48655 HCAPLUS
DOCUMENT NUMBER: 104:48655
TITLE: Study of the biochemical characteristics of enterobacteria on polystyrene plates
AUTHOR(S): Kuvaeva, I. B.; Kuznetsova, G. G.; Sakimbaeva, S. D.; Grigor'eva, A. N.
CORPORATE SOURCE: Inst. Pitan, Moscow, USSR
SOURCE: Voprosy Pitaniya (1985), (5), 51-5
CODEN: VPITAR; ISSN: 0042-8833
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB A rapid micromethod is developed for **identification** of enteric **bacteria** based on carrying out 23 biochem. tests in polystyrene plates. Application of the method for 84 **bacterial** strains produced satisfactory results comparable to those obtained by conventional methods using API microsystem (France). The method requires less time (6-8 h vs. 18-48 h), culture media, and reagents.

CC 10-5 (Microbial Biochemistry)
Section cross-reference(s): 9

ST enteric **bacteria identification micromethod** polystyrene; Enterobacteriaceae biochem test polystyrene plate

IT Enterobacteriaceae

(**identification** of, by biochem. tests in polystyrene plates)
IT **Bacteria**
(intestinal, **identification** of, by biochem. tests in polystyrene plates)

L97 ANSWER 22 OF 43 MEDLINE on STN
ACCESSION NUMBER: 85261895 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3894412
TITLE: Comparison of the PRAS II, AN-Ident, and RapID-ANA systems for identification of anaerobic bacteria.
AUTHOR: Burlage R S; Ellner P D
SOURCE: Journal of clinical microbiology, (1985 Jul) 22 (1) 32-5. Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198509
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850906
AB Two rapid systems for the identification of anaerobes were compared to a conventional growth system aided by a computer. The rapid systems (AN-Ident and RapID-ANA) are non-growth-dependent **micromethods** that identify anaerobes in 4 h by the action of various constitutive enzymes on chromogenic substrates. The organisms tested were 98 anaerobes, most of which were clinical isolates. The AN-Ident system identified 76 of these to species level and 86 to genus level; the RapID-ANA system correctly identified 74 of the organisms to species level and identified 93 to genus level. The PRAS II system correctly identified 77 to species level and 96 to genus level. In most instances, adequate identification could be obtained with either of the two rapid systems, but the conventional PRAS II system remains the most accurate.
CT Check Tags: Comparative Study; Human
***Bacteria, Anaerobic: CL, classification**
Bacteria, Anaerobic: PH, physiology
Bacteriological Techniques
Bacteroides: CL, classification
Clostridium: CL, classification
Fusobacterium: CL, classification
Gram-Negative Bacteria
Gram-Positive Bacteria
Peptostreptococcus: CL, classification
*Reagent Kits, Diagnostic
Reagent Strips
CN 0 (Reagent Kits, Diagnostic); 0 (Reagent Strips)

L97 ANSWER 23 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1985:145821 HCAPLUS
DOCUMENT NUMBER: 102:145821
TITLE: Differentiation of gram negative rods other than Enterobacteriaceae and Vibrionaceae by a **micromethod** for determination of carbon substrate assimilation
AUTHOR(S): Freney, Jean; Laban, Pierre; Desmonceaux, Mireille; Gayral, Jean Pierre; Fleurette, Jean
CORPORATE SOURCE: Lab. Bacteriol., Fac. Med. Alexis Carrel, Lyon, 69372, Fr.
SOURCE: Zentralblatt fuer Bakteriologie, Mikrobiologie und Hygiene, Series A: Medical Microbiology, Infectious

Diseases, Virology, Parasitology (1984), 258(2-3), 198-212
CODEN: ZBMPEJ; ISSN: 0176-6724
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The assimilation techniques described for taxonomic study are unsuitable for routine diagnosis because of the need for purification and standardization of substrates, the great quantity of medium consumed, and difficulties in interpreting the results. A standardized micromethod (API Strip) for the study of C substrate assimilation by **bacteria** has recently been described. The prototype gallery used consisted of 2 strips of 32 microtubes each containing dehydrated C substrate. Each strip contained 30 tests plus pos. and neg. controls. The suspension medium was a synthetic semi-gel. A total of 1046 strains of gram-neg. rods representing 41 species of Pseudomonas, Alcaligenes, Moraxella, Acinetobacter, Flavobacterium, and the EF4 group were tested. Automatic reading was performed after incubation at 32° for 1 day, or 2 days for slow-growing **bacteria**, using an ATB 1500 reader (API System) linked to a HP 85 microcomputer (Hewlett-Packard). Most species showed typical C substrate assimilation patterns allowing their differentiation from other species within each genus. The results obtained with the micromethod agreed in large measure with the nutritional patterns reported by other workers. It should be possible to use these results to construct a set of tests suitable for **identifying** species of gram-neg. rods other than Enterobacteriaceae and Vibrionaceae.

CC 10-1 (Microbial Biochemistry)

ST carbon substrate metab **bacteria** taxonomy

IT Amino acids, biological studies
Carbohydrates and Sugars, biological studies
Carboxylic acids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of, by gram-neg. **bacteria**, taxonomy in relation to)

IT Taxonomy
(of **bacteria**, gram-neg., carbon substrates metabolism in relation to)

IT **Bacteria**
(gram-neg., carbon substrates metabolism by, taxonomy in relation to)

IT 50-99-7, biological studies 56-41-7, biological studies 56-45-1, biological studies 56-81-5, biological studies 56-84-8, biological studies 58-86-6, biological studies 59-23-4, biological studies 61-90-5, biological studies 64-19-7, biological studies 69-65-8 69-79-4 71-00-1, biological studies 72-18-4, biological studies 72-19-5, biological studies 77-92-9, biological studies 79-09-4, biological studies 97-65-4, biological studies 99-20-7 99-96-7, biological studies 107-92-6, biological studies 109-52-4, biological studies 111-14-8 111-20-6, biological studies 123-99-9, biological studies 141-82-2, biological studies 147-85-3, biological studies 328-50-7 334-48-5 338-69-2 473-81-4 505-48-6 526-95-4 531-75-9 5328-37-0 7440-44-0, biological studies 7512-17-6 69468-17-3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of, by gram-neg. **bacteria**, taxonomy in relation to)

L97 ANSWER 24 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1985:145820 HCAPLUS
DOCUMENT NUMBER: 102:145820
TITLE: Differentiation of Enterobacteriaceae and Vibrionaceae by a **micromethod** for determination of carbon substrate assimilation

AUTHOR(S): Freney, Jean; Laban, Pierre; Desmonceaux, Mireille; Gayral, Jean Pierre; Fleurette, Jean
CORPORATE SOURCE: Lab. Bacteriol., Fac. Med. Alexis Carrel, Lyon, 69372, Fr.
SOURCE: Zentralblatt fuer Bakteriologie, Mikrobiologie und Hygiene, Series A: Medical Microbiology, Infectious Diseases, Virology, Parasitology (1984), 258(2-3), 187-97
CODEN: ZBMPEJ; ISSN: 0176-6724
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The assimilation techniques described for taxonomic study are unsuitable for routine diagnosis because of the need for purification and standardization of substrates, the great quantity of medium consumed, and difficulties in interpreting the results. A standardized micromethod (API strip) for the study of C substrate assimilation by **bacteria** has recently been described. The prototype gallery used consisted of 2 strips of 32 microtubes each containing dehydrated C substrate. Each strip contained 30 tests plus pos. and neg. controls. The suspension medium was a synthetic semi-gel. A total of 914 strains of gram-neg. rods representing 44 species of Enterobacteriaceae and Vibrionaceae were tested. Automatic reading was performed after incubation at 32° for 1 day, or 2 days for slow-growing **bacteria** using an ATB-1500 reader (API System) linked to a HP 85 microcomputer (Hewlett-Packard). Most species showed typical C substrate assimilation patterns allowing their differentiation from other species within each genus. The results obtained with the micromethod agreed in large measure with the nutritional patterns reported by other workers. It should be possible to use these results to construct a coherent framework of tests suitable for **identifying** species of Enterobacteriaceae and Vibrionaceae of clin. significance.

CC 10-1 (Microbial Biochemistry)

L97 ANSWER 25 OF 43 MEDLINE on STN
ACCESSION NUMBER: 84041155 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6355990
TITLE: [Rapid diagnosis of pathogenic bacteria isolated from stool cultures by a standardized **micromethod**]. Diagnostic rapide de bacteries pathogenes isolees de coprocultures par une **micromethode** standardisee.
AUTHOR: Bingen E; Lambert-Zechovsky N; Proux M C
SOURCE: Pathologie-biologie, (1983 Sep) 31 (7) 596-8. Journal code: 0265365. ISSN: 0369-8114.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198312
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19831217

AB We evaluate a new and quick **micromethod** which detect strains of Salmonella, Shigella and Yersinia from suspected colonies isolated of stool specimens. In our study, from 2 384 non pathogen bacteria or as Salmonella. And we determined 297 strains of Salmonella, two hours after isolation on selective medium. This method is very easy and permits to have a rapid diagnostic of strains of Salmonella.

CT Check Tags: Human
***Bacteria: IP, isolation & purification**
Bacteriological Techniques
Culture Media

English Abstract
*Feces: MI, microbiology
CN 0 (Culture Media)

L97 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:578039 HCAPLUS
DOCUMENT NUMBER: 97:178039
TITLE: **Micromethod** determination of **bactericidal** activity of antiseptics and disinfectants
AUTHOR(S): Surgot, M.; Fleurette, J.; Reverdy, M. E.
CORPORATE SOURCE: Cent. Rech. Epidemiol. Staphylocoques Streptocoques, Fac. Med., Lyon, 69372, Fr.
SOURCE: Revue de l'Institut Pasteur de Lyon (1982), 15(2), 241-52
CODEN: IPLRBU; ISSN: 0020-2487
DOCUMENT TYPE: Journal
LANGUAGE: French
AB The min. **bactericidal** concentration (MBC) of 3 com. antiseptics, betadine, sterlane, and hexomedine, was determined by a simplified dilution neutralization method by using Escherichia coli CNCM 54127 and Staphylococcus aureus CNCM 53154 and the results were compared to those obtained by the reference dilution neutralization method of **bacterial** suspensions (AFNOR T 72-150). The method involves placing 50 μL **bacterial** suspension in each well of a plastic transfer plate and 50 μL of each diluted antiseptic into each well of a microliter plastic plate, transferring the contents of each well of the transfer plate into a corresponding well of the microliter plate containing the antiseptic, agitating for 30 s, and following a 5-min contact, transferring onto Letheen agar containing neutralizing agent, and reading the MBCs after incubation at 37° for 24 h. Alternatively, the MCBs were read after transferring the antiseptic-**bacteria** suspension into the well of a plate contg 50 μL Letheen broth and the neutralizing agent, agitating 1 min, and transferring, after 10-min, on plate **count** agar. Identical results were obtained by using Letheen agar or Letheen broth. The method is reproducible, gives comparable results to the reference method, and is more rapid and utilizes less material than the reference method.
CC 9-2 (Biochemical Methods)
Section cross-reference(s): 63
ST antiseptic **bactericidal** activity detn; disinfectant **bactericidal** activity detn; betadine **bactericidal** activity detn; sterlane **bactericidal** activity detn; hexomedine **bactericidal** activity detn; Escherichia antiseptic **bactericidal** activity; Staphylococcus antiseptic **bactericidal** activity
IT **Bactericides**, Disinfectants, and Antiseptics
(activity of, determination of, by dilution neutralization of **bacterial** suspensions)
IT Escherichia coli
Staphylococcus aureus
(in **bactericidal** activity determination of antiseptics by dilution neutralization)
IT 659-40-5 25655-41-8 57035-76-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**bactericide** activity of, determination of, by dilution neutralization on **bacterial** suspensions)

L97 ANSWER 27 OF 43 MEDLINE on STN
ACCESSION NUMBER: 81158666 MEDLINE

DOCUMENT NUMBER: PubMed ID: 7011166
TITLE: Identification of clinically significant anaerobic bacteria.
AUTHOR: Burdash N M; Brunson P; Fortuna P; West M; Bannister E
SOURCE: Annals of clinical and laboratory science, (1981 Jan-Feb) 11 (1) 19-24.
Journal code: 0410247. ISSN: 0091-7370.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198105
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19810521

AB By combining the various methodologies for anaerobic bacteriology, a scheme has been developed with four flow charts for the identification of the clinically significant anaerobic organisms. This scheme incorporates the use of gas chromatography and a **micromethod** biochemical system.

CT Check Tags: Human
Anaerobiosis
***Bacteria: IP, isolation & purification**
Bacteriological Techniques
Chromatography, Gas
Methods
Microchemistry
Models, Biological

L97 ANSWER 28 OF 43 MEDLINE on STN
ACCESSION NUMBER: 79252975 MEDLINE
DOCUMENT NUMBER: PubMed ID: 38662
TITLE: Detection of experimental bacteremia and fungemia by examination of buffy coat prepared by a **micromethod**.
AUTHOR: Kostiala A A; Jormalainen S; Kosunen T U
SOURCE: American journal of clinical pathology, (1979 Sep) 72 (3) 437-43.
Journal code: 0370470. ISSN: 0002-9173.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197910
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19950206
Entered Medline: 19791026

AB Rabbits received intravenous injections of bacteria or fungi, and a comparison was made of the abilities of broth cultures, plating after dilution either in saline solution or in distilled water containing Triton X-100, and buffy coat examinations to detect the organisms in heart blood. The most sensitive method was broth culture. By microscopy or subculture of buffy coat cells prepared by centrifugation of blood in microhematocrit tubes, organisms were rapidly and regularly detected when their viable counts increased to 300--1,000/ml as detected by plating. By micromodification, buffy coat examination is technically easy to perform, and the method is only slightly less sensitive than when a larger amount of blood is used. Thus, it would be ideal for rapid provisional diagnosis of sepsis in patients, e.g., neonates, when the use of only a small blood sample is preferred.

CT Check Tags: Female; Male
Animals
***Bacteriological Techniques**
Candida albicans: IP, isolation & purification
Escherichia coli: IP, isolation & purification
Haemophilus influenzae: IP, isolation & purification
Klebsiella pneumoniae: IP, isolation & purification
Listeria monocytogenes: IP, isolation & purification
*Mycoses: BL, blood
Neisseria meningitidis: IP, isolation & purification
Pseudomonas aeruginosa: IP, isolation & purification
Rabbits
*Septicemia: DI, diagnosis
Staphylococcus aureus: IP, isolation & purification
Streptococcus agalactiae: IP, isolation & purification
Streptococcus pneumoniae: IP, isolation & purification

L97 ANSWER 29 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:559791 HCAPLUS
DOCUMENT NUMBER: 89:159791
TITLE: **Micromethod** for **identification** of **bacteria**
INVENTOR(S): Barth, Jean Georges
PATENT ASSIGNEE(S): Hopital Civil Saint-Nicolas de Sarrebourg, Fr.
SOURCE: Fr. Demande, 15 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2356723	A1	19780127	FR 1976-20822	19760630
FR 2356723	B1	19781222		
PRIORITY APPLN. INFO.:			FR 1976-20822	19760630

AB A micromethod for the **identification** of **bacteria**, especially enterobacteria is described which is carried out on microtitrn. plates or in hemolysis tubes. The culture samples are **identified** as to biochem. properties relating to glucose fermentation, β-galactosidase, nitrate reduction, acetoin production, citrate and malonate utilization, lysine decarboxylase, ornithine decarboxylase, tryptophan deaminase, indole production, urease, H2S production, gelatinase, and mannitol, inositol, sorbitol, rhamnose, sucrose, raffinose, arabinose, adonitol, and salicin fermentation The method is equally effective in studying the fermentation of other sugars such as fructose, galactose, maltose, xylose, amygdalin, or dulcitol. The micromethod consists of placing an enterobacteria sample in gallery broth in a stove at 37° for 2 h, and then the reagents in polystyrene crystalline hemolysis tubes are inoculated with broth and the color reactions monitored. A list of pos. and neg. colors for each reaction is provided. The method is simpler and faster than classical methods for the **identification** of **bacteria.**
IC C12K001-04
CC 9-6 (Biochemical Methods)
Section cross-reference(s): 10
ST **bacteria identification** reagent; color reaction enterobacteria **identification**

IT Sugars, biological studies
RL: BIOL (Biological study)
(fermentation of, determination of, in **bacteria identification**)
IT **Bacteria**
(**identification** of, reagents and **micromethod** for)
IT Nitrates, biological studies
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of, determination of, in **bacteria identification**)
IT 9002-13-5
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in **bacteria** suspensions in **bacteria identification**)
IT 9040-48-6
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in **bacteria** suspensions in **bacterial identification**)
IT 9024-60-6 9024-76-4 9031-11-2 37367-68-3
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in **bacterial** suspensions in **bacteria identification**)
IT 50-70-4, analysis 50-99-7, analysis 57-48-7, analysis 57-50-1, analysis 58-86-6, analysis 59-23-4, analysis 69-65-8 69-79-4 87-89-8 138-52-3 147-81-9 488-81-3 512-69-6 608-66-2 3615-41-6 9013-03-0 29883-15-6
RL: ANST (Analytical study)
(fermentation of, determination of, in **bacteria identification**)
IT 120-72-9, analysis 513-86-0 7783-06-4, analysis
RL: FORM (Formation, nonpreparative)
(formation of, determination of, in **bacteria identification**)
IT 77-92-9, analysis 141-82-2, analysis
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of, determination of, in **bacteria identification**)

L97 ANSWER 30 OF 43 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1978:172628 BIOSIS
DOCUMENT NUMBER: PREV197865059628; BA65:59628
TITLE: EVALUATION OF A MICRO METHOD FOR DETERMINATION OF STREPTOCOCCUS-MUTANS AND LACTOBACILLUS INFECTION.
AUTHOR(S): WESTERGREN G [Reprint author]; KRASSE B
CORPORATE SOURCE: DEP CARIOL, FAC ODONTOL, UNIV GOTEB, GOTEBORG 33, SWED
SOURCE: Journal of Clinical Microbiology, (1978) Vol. 7, No. 1, pp. 82-83.
CODEN: JCMIDW. ISSN: 0095-1137.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB A **micromethod** was developed for quantitative estimation in [human] saliva of S. mutans and lactobacilli. With a semiautomatic pipette, 25 µl of diluted saliva was spotted on the surface of an agar **plate** containing a selective medium. This volume gave a spot with a diameter of about 10 mm in which separate **colonies** could be counted. The results obtained with the spotting technique showed excellent agreement with those obtained with conventional agar plating. The method is convenient and results in a substantial saving of culture media.
CC Biochemistry studies - Carbohydrates 10068
Blood - Other body fluids 15010

Dental biology - General and methods 19001
Dental biology - Pathology 19006
Physiology and biochemistry of bacteria 31000
Microbiological apparatus, methods and media 32000
Medical and clinical microbiology - General and methods 36001
Medical and clinical microbiology - Bacteriology 36002
IT Major Concepts
Dental Medicine (Human Medicine, Medical Sciences); Infection; Methods and Techniques
IT Miscellaneous Descriptors
HUMAN SALIVA
ORGN Classifier
Bacteria 05000
Super Taxa
Microorganisms
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
RN 72146-52-2D (MUTANS)

L97 ANSWER 31 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:3076 HCAPLUS
DOCUMENT NUMBER: 90:3076
TITLE: **Micromethod** for rapid **identification** of gram-negative, nonfermentative **bacteria**
AUTHOR(S): Gibson, James B.; Crull, Sandra L.; Borchardt, Kenneth A.
CORPORATE SOURCE: Clin. Microbiol. Lab., U. S. Public Health Serv. Hosp., San Francisco, CA, USA
SOURCE: Health Laboratory Science (1978), 15(1), 9-14
CODEN: HLSCAE; ISSN: 0017-9035
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Some 124 nonfermentative gram-neg. rods representing environmental and clin. isolates were tested by a Micro-Non-Fermenter System (MNFS) which combined oxidative assimilation tests with conventional biochem. reactions. The MNFS consisted of an inoculating tray containing 24 wells of biochems. in 100 μL quantities stored at -20° and reliquified before inoculation. The tests included growth in various media, utilization of 9 carbohydrates, activities of various enzymes as well as colony morphol. and temperature tolerance. The MNFS was compared with a conventional system of biochem. tests suggested by the Center for Disease Control (Weaver, R. E., et al., 1972). From the 124 cultures, a total of 11 different **organisms** were **identified.** All but 1 of the 124 cultures was **identified** correctly with the MNFS system, whereas with the conventional system 5 cultures were **misidentified** . All MNFS biochem. reactions were read at 18 and 48 h.
CC 10-13 (Microbial Biochemistry)
ST **bacteria** gram neg **identification micromethod** ; taxonomy **identification** gram neg **bacteria**; enzyme gram neg **bacteria identification**; carbohydrate gram neg **bacteria identification**
IT **Bacteria**
(gram-neg., **micromethod** for rapid **identification** of)

L97 ANSWER 32 OF 43 MEDLINE on STN
ACCESSION NUMBER: 78016304 MEDLINE
DOCUMENT NUMBER: PubMed ID: 333828
TITLE: [Experiences with the API 20A system in routine species identification of anaerobes (author's transl)]. Erfahrungen mit dem API 20A-Testsystem bei der Identifizierung von Anaerobiern aus taglichen Routine.
AUTHOR: Essers L; Haralambie E
SOURCE: Zentralblatt fur Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. Erste Abteilung Originale. Reihe A: Medizinische Mikrobiologie und Parasitologie, (1977 Jul) 238 (3) 394-401. Journal code: 0331570. ISSN: 0300-9688.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197711
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19771130

AB The API 20A System was tested in three modifications: a) The microtubes were inoculated with the API anaerobe basal medium, filled up completely with sterile mineral oil and incubated aerobically. b) The test strips were inoculated with the basal medium and incubated in an anaerobic chamber. c) The strips were inoculated with a modified Viande-Levure medium containing Tween 80, vitamin K3 and hemin. The microtubes were covered with sterile mineral oil and incubated in an anaerobic chamber. Each procedure was compared with the conventional method (PRAS) of the Virginia Polytechnic Institute. The overall agreement between the three modifications of the API System and the conventional method was 83.2, 91.7, and 98.5% related to the number of tests performed. The advantage of the modified medium was also demonstrated by measuring the growth rate of some anaerobes in thioglycolate broth, API basal medium and VL-medium, modified as mentioned above, nephelometrically. So the **micromethod** is more accurate and reliable when inoculated with an improved medium.

CT Check Tags: Comparative Study; Human
Anaerobiosis
***Bacteria: CL, classification**
Bacteria: GD, growth & development
Bacterial Infections: MI, microbiology
***Bacteriological Techniques**
Bacteriological Techniques: IS, instrumentation
Culture Media
English Abstract
Evaluation Studies
Feces: MI, microbiology
Reagent Strips
CN 0 (Culture Media); 0 (Reagent Strips)

L97 ANSWER 33 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:419733 HCAPLUS
DOCUMENT NUMBER: 89:19733
TITLE: A comparison of miniaturized and micro methods of **bacterial identification** with standard biochemical techniques
AUTHOR(S): McCain, C. S.; Srisuparbh, Kiti
CORPORATE SOURCE: Dep. Vet. Microbiol. Pathol., Pullman, WA, USA

SOURCE: Proceedings of Annual Meeting - American Association of Veterinary Laboratory Diagnosticians (1977), 20, 351-6
CODEN: PAMDDZ; ISSN: 0098-3543
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Micromethods for determining **bacteria** in clin. material were compared with conventional methods using com. media. The systems include: the Minitek aerobe system which uses paper disks impregnated with appropriate chems. for biochem. detns.; the Enterotube system consisting of a multimedia tube containing prepared media in 8 compartments for determining 11 biochem. activities; and the API-20 E system which utilizes a prepared strip of 20 microtubes each containing a specific amount of preweighed substrate for biochem. testing. The micro, miniaturized methods are not as accurate as conventional methods, but their versatility warrants their use in selected cases.

CC 9-13 (Biochemical Methods)
Section cross-reference(s): 10, 14

ST **bacteria identification** clin medicine

IT Actinomyces
Bacteria
Bacteroides
Clostridium
Enterobacteriaceae
Fusobacterium
(**identification** of, in clin. biochem., **micromethods** for)

IT **Bacteria**
(gram-neg., **identification** of, in clin. biochem., **micromethods** for)

L97 ANSWER 34 OF 43 MEDLINE on STN
ACCESSION NUMBER: 77029198 MEDLINE
DOCUMENT NUMBER: PubMed ID: 789392
TITLE: Semi-microtechnique for the biochemical characterization of anaerobic bacteria.
AUTHOR: Morgan J R; Liu P Y; Smith J A
SOURCE: Journal of clinical microbiology, (1976 Oct) 4 (4) 315-8.
Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197612
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19761230

AB A semi-**micromethod** is described for characterizing anaerobic bacteria by substrate utilization. Small volumes of individual substrates were placed in the wells of plastic microtiter trays. When heavy inocula and a colorimetric indicator were used, complete results were available after 30 h of incubation. Microtiter trays containing a range of substrates can be stored at -20 degrees C. The method is accurate, economical, and convenient for use in a hospital microbiology laboratory.

CT Check Tags: Comparative Study
Anaerobiosis
***Bacteria: CL, classification**
Bacteria: ME, metabolism
***Bacteriological Techniques**
Carbohydrates: ME, metabolism

Evaluation Studies
CN 0 (Carbohydrates)

L97 ANSWER 35 OF 43 MEDLINE on STN
ACCESSION NUMBER: 77006419 MEDLINE
DOCUMENT NUMBER: PubMed ID: 787009
TITLE: Comparison of API and Minitek to Center for Disease Control methods for the biochemical characterization of anaerobes.
AUTHOR: Hansen S L; Stewart B J
SOURCE: Journal of clinical microbiology, (1976 Sep) 4 (3) 227-31. Journal code: 7505564. ISSN: 0095-1137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197612
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19761203

AB Two commercially available **micromethod** multitest systems (API, Analytab Products, Inc., Minitek-Bioquest) were compared with conventional tests suggested by the Center for Disease Control for the identification of anaerobes. Anaerobiosis for the microsystems was achieved using GasPak system (BBL), A total of 175 anaerobes, including 158 clinical isolates and 17 reference strains, were used. Gram morphology, gas-liquid chromatography data, and biochemical reactions from the Center for Disease Control and Virginia Polytechnic Institute anaerobic manuals were used to identify the organisms. The Minitek system included a new anaerobe inoculum broth and two new disks, dextrose without nitrate and nitrate reductase disks. The percentage of correlation of 12 biochemicals using Minitek and 11 biochemicals using the API were compared with the Center for Disease Control reactions. The percentage of correlation of both positive and negative reactions with the API anaerobic strip ranged from 70.8 to 99.4% and with the Minitek from 97.1 to 100%. The microsystems were also evaluated as to the ease of use, adaptabilty to a clinical laboratory, time, and cost.

CT Check Tags: Comparative Study
Anaerobiosis
***Bacteria: CL, classification**
***Bacteriological Techniques**
Bacteriological Techniques: IS, instrumentation
Evaluation Studies

L97 ANSWER 36 OF 43 MEDLINE on STN
ACCESSION NUMBER: 76086643 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1106325
TITLE: **Micromethod** for identification of anaerobic bacteria: design and operation of apparatus.
AUTHOR: Wilkins T D; Walker C B; Moore W E
SOURCE: Applied microbiology, (1975 Nov) 30 (5) 831-7. Journal code: 7605802. ISSN: 0003-6919.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197602
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19760213

AB A replicator is described for transferring 48 bacterial cultures into

separate wells of microtiter plates. The device was designed for determination of carbohydrate fermentation patterns of anaerobic bacteria but should be useful for other applications. A simple device for filling microtiter wells with media is also described.

CT Check Tags: Support, U.S. Gov't, P.H.S.
Anaerobiosis
***Bacteria: IP, isolation & purification**
Bacteria: ME, metabolism
***Bacteriological Techniques: IS, instrumentation**
Carbohydrates: ME, metabolism
Fermentation

CN 0 (Carbohydrates)

L97 ANSWER 37 OF 43 MEDLINE on STN
ACCESSION NUMBER: 76086642 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1106324
TITLE: Development of a **micromethod** for identification of anaerobic bacteria.
AUTHOR: Wilkins T D; Walker C B
SOURCE: Applied microbiology, (1975 Nov) 30 (5) 825-30. Journal code: 7605802. ISSN: 0003-6919.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197602
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19760213

AB A microprocedure was described for determining the carbohydrate fermentation patterns of 48 anaerobic bacteria at one time in microtiter plates. The cultures were transferred into agar-filled wells of microtiter plates with a replicator inside an anaerobic glove box. Fermentation was measured both with a colorimetric indicator and with a small pH electrode. The method was approximately 97% accurate. It would be most useful for laboratories that need to identify large numbers of anaerobes at one time.

CT Check Tags: Support, U.S. Gov't, P.H.S.
Anaerobiosis
***Bacteria: IP, isolation & purification**
Bacteria: ME, metabolism
***Bacteriological Techniques**
Bacteriological Techniques: IS, instrumentation
Carbohydrates: ME, metabolism
Culture Media
Cysteine: PD, pharmacology
Dithioerythritol: PD, pharmacology
Evaluation Studies
Fermentation
Formaldehyde: PD, pharmacology
Mercaptoethanol: PD, pharmacology

RN 50-00-0 (Formaldehyde); 52-90-4 (Cysteine); 60-24-2 (Mercaptoethanol); 6892-68-8 (Dithioerythritol)

CN 0 (Carbohydrates); 0 (Culture Media)

L97 ANSWER 38 OF 43 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 73209863 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4577172
TITLE: **Micromethod** system for identification of anaerobic bacteria.

AUTHOR: Starr S E; Thompson F S; Dowell V R Jr; Balows A
SOURCE: Applied microbiology, (1973 May) 25 (5) 713-7.
Journal code: 7605802. ISSN: 0003-6919.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197309
ENTRY DATE: Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19730906

CT Anaerobiosis
***Bacteria: CL, classification**
Bacteria: ME, metabolism
*Bacterial Infections: DI, diagnosis
Bacteriological Techniques
Bacteroides: ME, metabolism
Clostridium
Culture Media
Fermentation
Flavonoids: ME, metabolism
Fructose: ME, metabolism
Galactose: ME, metabolism
Hydrolysis
Methods
Starch: ME, metabolism
Time Factors
RN 26566-61-0 (Galactose); 30237-26-4 (Fructose); 9005-25-8 (Starch)
CN 0 (Culture Media); 0 (Flavonoids)

L97 ANSWER 39 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1974:142587 HCAPLUS
DOCUMENT NUMBER: 80:142587
TITLE: Determination of **bacterial** DNA nucleotide composition. I. Electrophoretic **micromethod** for quantitative analysis of purine and pyrimidine bases
AUTHOR(S): Marcheva, D.; Marchev, N.
CORPORATE SOURCE: Nauchnoizsled. Khim.-Farm. Inst., Sofia, Bulg.
SOURCE: Epidemiologiya, Mikrobiologiya i Infektsiozni Bolesti (1973), 10(3), 276-81
CODEN: EMIBA3; ISSN: 0425-1482
DOCUMENT TYPE: Journal
LANGUAGE: Bulgarian
AB A method of electrophoretic separation and extraction of DNA bases is described.
The bases were separated by electrophoresis on agar plates (5 + 20 cm) of 0.6% agar in 0.1M acetate buffer pH 4.1 at 8 v/cm and 7 mA. The position of individual bases was **identified** in uv light at 254 nm. The elution of the bases from the agar gel was achieved by electrophoresis in tubes containing a semipermeable membrane. The gel containing
the base was placed between 1 cm layers of 3% agar. The elution was effected at 150 V and 10 mA. The concentration of the bases in the eluates was determined by measuring the absorbance at 260 nm and 275 nm, resp., for adenine, guanine, and thymine and for cytosine.
CC 9-3 (Biochemical Methods)
Section cross-reference(s): 6
ST **bacteria** DNA nucleoside electrophoresis
IT **Bacteria**

(DNA nucleosides of, determination by electrophoresis)
IT 65-71-4 71-30-7 73-24-5, analysis 73-40-5
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in **bacterial** DNA by electrophoresis)

L97 ANSWER 40 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1973:14280 HCAPLUS
DOCUMENT NUMBER: 78:14280
TITLE: **Micromethod** for the fractionation and **identification** of **bacterial** proteins
AUTHOR(S): Bel'skaya, N. A.; Mitina, V. S.; Veinblat, V. I.
CORPORATE SOURCE: Biokhim. Otd., Saratov. Nauchno-Issled. Inst. "Mikrob", Saratov, USSR
SOURCE: Laboratornoe Delo (1972), (10), 614-16
CODEN: LABDAZ; ISSN: 0023-6748
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Small amts. of plague microbe antigens in a protein extract were determined by combining acrylamide gel disc electrophoresis with immunopptn. in agar gel. The method permits the **identification** of the antigens without their separation
CC 15-1 (Immunochemistry)
ST protein **bacteria** immunoelectrophoresis; antigen plague **bacteria**

L97 ANSWER 41 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:118530 HCAPLUS
DOCUMENT NUMBER: 72:118530
TITLE: **Micromethod** for **identifying bacteria.** II. **Identification** of the genus Staphylococcus
AUTHOR(S): Peny, J.; Buissiere, J.
CORPORATE SOURCE: Div. Microbiol., Centre Rech. Serv. Sante Armees, Lyons, Fr.
SOURCE: Annales de l'Institut Pasteur (Paris) (1970), 118(1), 10-18
CODEN: AIPAAV; ISSN: 0020-2444
DOCUMENT TYPE: Journal
LANGUAGE: French
AB A study of 29 strains of gram-pos. and catalase-pos. strains of cocci from collections and of 279 strains isolated from pathol. specimens demonstrated 3 biochem. characteristics as being useful in distinguishing the genus Staphylococcus from the genus Micrococcus: the degradation of DL-nap hthylamide, the decarboxylation of arginine, and the anaerobic utilization of glucose. The tests were reliable for S. aureus but tended to place among the genus Micrococcus strains which have a potential pathogenicity. The latter strains might better be included in the species S. epidermidis.
CC 7 (Plant Biochemistry)
ST chemotaxonomy **bacteria** enzymes; **bacteria** chemotaxonomy enzymes; enzymes chemotaxonomy **bacteria**
IT Staphylococcus
(**identification** of, **micromethod** for)

L97 ANSWER 42 OF 43 MEDLINE on STN
ACCESSION NUMBER: 69002758 MEDLINE
DOCUMENT NUMBER: PubMed ID: 4878337
TITLE: [**Micromethod** of identifying bacteria. I. Value of the quantification of biochemical characteristics]. **Micromethode** d'identification des bacteries. I.

Interet de la quantification des caracters biochimiques.
AUTHOR: Buissiere J; Nardon P
SOURCE: Annales de l'Institut Pasteur, (1968 Aug) 115 (2) 218-31.
Journal code: 7512320. ISSN: 0020-2444.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 196811
ENTRY DATE: Entered STN: 19900101
Last Updated on STN: 19900101
Entered Medline: 19681121
CT **Bacteria: CL, classification**
Bacteria: ME, metabolism
***Bacteriological Techniques**
*Carbohydrates: ME, metabolism
Densitometry
Escherichia coli: CL, classification
*Escherichia coli: ME, metabolism
CN 0 (Carbohydrates)

L97 ANSWER 43 OF 43 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1945:31921 HCAPLUS
DOCUMENT NUMBER: 39:31921
ORIGINAL REFERENCE NO.: 39:5210e-g
TITLE: Specific **micromethod** for the determination of acyl phosphates
AUTHOR(S): Lipmann, Fritz; Tuttle, L. Constance
SOURCE: Journal of Biological Chemistry (1945), 159, 21-8
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 38, 6272.9. This method utilizes the reaction of acyl phosphates with hydroxylamine, and the acyl part of the acid anhydride is converted into hydroxamic acid thus: R.COOPO3-- + H2NOH = R.CONHOH + HOPO3--. The hydroxamic acid forms, with Fe+++, a purple complex. The lower limit of the method is 8 γ of acyl P. The reading is with the photoelec. colorimeter; the main absorption of the Fe complex lies between 540 and 480 mμ. Expts. are reported in which this method is used on acetyl phosphate formation with **bacterial** exts., and phosphoglyceryl phosphate formation with crude muscle prepns. An **unidentified** substance yielding hydroxamic acid was found to appear when oxalacetate is added to muscle extract
CC 7 (Analytical Chemistry)
IT **Bacteria**
(acetyl phosphate determination in exts. of)
IT 590-54-5, Acetic acid, anhydride with H3PO4 7664-38-2, Phosphoric acid
(determination in **bacterial** exts.)

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